

## Cahier No. 28

Creptographie<br>Ou<br>Dages sur le développement de l'alphabet en ÉEppte ancienne<br>PAR<br>Etienne Drioton et H.W. Fairman

II H.W. Fairman

Edité par
Dr. Dia' Abou - Ghazi


LE GAIRE
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Herbert $\mathrm{W}_{\text {alter }}$ Fairman
9 March 1907 - 16 November 1982.

## Herbert W. Fairman <br> and Ptolemaic script.

The interest of H. Fairman in Ptolemaic texts began later than his interest in Egyptian archaeology.(1) As mentioned by Fairman it began :
"During the Winter of 1943-1944 at the request of a number of friends and colleagues I devoted a series of talks to an analysis of the way in which Ptolemaic signs obtained their values, my remarks having particular reference to Edfu. This analysis served in a sense as a series of rules for decipherment which were put to the test in readings in Ptolemaic texts and were found to work. After the introductory talks it was suggested to me that it might be useful to give them a more permanent form and the present paper $\left({ }^{2}\right)$ is the result. Through the courtesy of M. Charles Kuentz, who placed a room, blackboard and every facility at our disposal, these talks were given at the Institut français d'Archéologie orientale and I gladly take this opportunity of expressing to M. Kuentz the gratitude of my friends and myself for all that he did to make our meetings and discussions possible". ${ }^{(3)}$

Fairman's studies in this field that appeared through 1943-1950 are :

* Notes on the alphabetic signs employed in the hieroglyphic inscriptions of the temple of Edfu, with an appendix by Beinard Grdseloff. ASAE, XLIII, p. 191-318. - Le Caire, 1943.

[^0]- An introduction to the study of Ptolemaic signs and their values. BIFAOC, T. XLIII, p. 51-138.-Le Caire, 1945
* Ptolemaic notes. ASAE., T. XLIV, p. 263-277. Le Caire, 1945.
- Two Ptolemaic alphabetic values of $\times \sim$. JEA, vol, 36, p. 110-111. - London, 1950,

Further items with Blackman, with whom he "collaborated for many years in a singularly happy, free, frank, and stimulating study of Ptolemaic" (1) as follows:

- A group of texts inscribed on the façade of the sanctuary in the temple of Horus at Edfu. Miscellanea Gregoriana, p. 397-428. - Poliglotta Vaticana, 1941,
- The myth of Horus at Edfu If. JEA, vol. 28, p. 32-38; vol. 29, p. 2-36; vol 30, p. 5-22, 79-80, London, 1942-1944.

Fairman's system, according to the nature of Ptolemaic writing, depended mainly on three things :

The origin of hieroglyphic writing in picture writing ; the consonantal nature of Egyptian writing and the wide use of the pun or rebus. ( $\left.{ }^{( }\right)$His views concerning the "Consonantal Principle" and the "Acrophony" in the formation of the "Uniconsonantal value", brought him

1. Nothing expresses the collaboration of Fairman and Blackman better than these words of Fairman. JEA 42, p., 104. See also, e.g.p. 545, 550 (note 4). 553, 554, 561,564 and note 1 , afterwards.
2. BIFAOC. 43, pp. 55.
in conflict with those of Drioton who opposed such principles. (See ibid. p. 496).

Fairman considered Drioton's method systemless one and depending on theories, $\left.{ }^{( }{ }^{1}\right)$ while he himself used a simple and direct system derived from analysis of the inscriptions and their decipherment. ${ }^{(2}$ ). Better to quote his main rule : "That decipherment should be difficult - leaves me personally unmoved as long as the final result is safe, for it is better to have a solitary text of whose reading all can be certain than a hundred easily obtained readings and all of them wrong.' $\left.{ }^{(3}\right)$.

Thus we have two opposing systems but in some cases each author accepted the other's decipherment. ( ${ }^{4}$ )

Fairman put Drioton in his high place through his saying : no one can work on Ptolemaic texts and not be very conscious of the deep debt, the stimulus and inspiration he owes to Dr. Drioton's cryptographic studies, which contain much of permanent and abiding worth to every student of Ptolemaic as well as cryptography..... (5) Then he dethroned him through the following sentences: "but this very fact makes it all the more necessary to combat the error of Acrophony that is distorting his results and methods and that thereby regrettably throws doubt on those parts of his work that are sound and permanent."

[^1]372
This opposition goes back to the nature of Acrophony being still a theory as well as the Consunantal Principle, a fact with which Fairman finds the impossibility of giving "definite proof the one or the other" ( ${ }^{1}$ ). Such discus. sions are necessary and helpful as it reveals the right notions.

But what is out of discussions is, both Drioton and Fairman $\left({ }^{2}\right)$ are outstanding specialists in the field of Ptolemaic Egyptian studies and both paved a wide way in studies ought to be completed.

Dia' Abou - Ghazi.

[^2]SERVICE DES ANTIQUITÉS DE L'EGYPTE

## NOTES (ON THE ALPHABETIC SIGNS

 EMPLOYED
## IN THE HIEROGLYPHIC INSCRIPTIONS

OF THE TEMPLE OF EDFU

BY
H.W. FAIRMAN

WITH AN APPENDIX

BY
BERNHARD GRDSELOHH

Extrait des Annales du Service des Antiquités de l’Égypte, T. XLIII, p. 193 - 318.

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## NOTES ON THE ALPHABETIC SIGNS

## EMPLOYED

## IN THE HIEROGLYPHIC INSCRIPTIONS OF THE TEMPLE OF EDFU

The following remarks are offered as a preliminary to a more detailed study of Ptolemaic signs and the Ptolemaic system of writing on which the writer has been engaged for some years past and which will take some time yet to complete. Nevertheless, it has been folt that a preliminary presentation and discussion of a limited class of signs may not come amiss, since it may serve to illustrate some of the principles which governed the selection of Ptolemaic signs and to pave the waty for the fuller study.

## A.-INTRODUCTORY REMARKS

(a) Scope of the present paper. -- The present paper has a strictly limited object and scope. Its interest is exclusively in the signs employed in the hieroglyphic texts of the Ptolemaic Temple of Edfu and is based on the complete publication of that temple initiated by Rochemonteix and so successfully completed by Chassinat('). The examples quoted, however, are drawn almost exclusively from volumes III-VIII of the publication, and more particularly from volumes III-VII, together with a few from the Mammisi.

[^3]This limitation has been made necessary by various considerations. In the first place, although the general system of writing employed in the temples of the GraccoRoman Period was more or less uniform, in detail each temple was individual and had its peculiarities in grammar, the forms of signs and the values which the signs bore. Thus it is no more possible to prepare a sign list that will apply in all cases to all temples than it is to prepare a common grammar.

Moreover, the texts at Edfu present Ftolemaïc writing at its earliest and best. The temple was built and completed entirely within the Ptolemaic Period and for the greater part of that time it was to all intents and purposes the chief building operation that was in progress and oonsequently it received the attention of the cream of the craftsmen and scribes of Egypt and was
 tion in work which has no equal by the foremost workers in their craft". It was only when the decoration of the temple was nearing completion that work on the Temple of Dendera, for instance, started and the diversion of skilled labour that resulted is immediately apparent in the increase in errors and the decline in the quality of the signes which is to be observed in the texts on the Pylon( ${ }^{( }$). Thus to a greater extent than any other late temple, Edfu forms a homogeneous unit and provides the ideal source for the study of the ideas, values and principles that informed Ptolemaic writing.

Furthermore, Edfu is the only temple of the period of which a complete and modern putlication is available.

[^4]For the other late temples we are still dependent on accurate copies of certain sections and on the often inaccurate copies of earlier scholars. No study of the other temples that had to depend on the existing, published copies of their texts could lay any claim lo accuracy, completeness or finality and any conclusions derived therefrom are liable to be inaccurate and misleading.

The necessity of limiting our examples in the main to volumes III-VII is imposed by this same quest for accuracy. The decoration of the Mammisi extended into Roman times and the Mammisi therefore does not afford quite as reliable or compact a source as might be desired; volume VIII contains an increased number of corruptions, the fault of the ancient scribes and not the modern copyist ; and unfortunately volumes I and II, though containing texts of great interest, do not attain that standard of accuracy reached by the later volumes. Volume I in particular contains so many wrong of uncertain forms, so many errors in copying and even, in many cases, so many omissions of entire words and sentences that without checking and collation it cannot be used as a reliable source. No example from volumes I and II is. quoted here, even if there is no reason to doubt its accuracy, unless it has been collated either with the original or with a photograph, and in fact very little use has been made of either volume.

This limitation is regrettable but it is inevitable if this study is to have any value, for the truth cannot emerge from sources of doubtful accuracy. When a revised edittion of volumes $1^{*}$ and II is published there is no doubt that a limited number of additions will have to be made to the list of alphabetic signs and values, but the sections of the temple on which the present study is based give
a very fair cross-section of the whole and there is no reason to expect that the phenomena to be observed and the conclusions to be drawn from them will be contradicted by the texts of the remainder of the temple.

A further limitation of the scope of this paper is that is concerned only with signs having alphabetic or monoconsonantal values ${ }^{1}$ ), plus a very small number of composite signs which for one reason or another have alphabetic values. Composite signs formed by the combination of alphabetic signs with other alphabetic or multiliteral signs are not dealt with, though passing referencemay be made to some of them.

It would have been most desirable to have dealt here with the morphology of the inscriptions, but this study has had regretfully to be postponed to a later occoasion since it would have resulted in at least the doubling or trebling of the present paper. Consequently, no attempt has been made here to study the addition or omission of signs, to give details of the interchange of signs or even to discuss the functions and uses of such combinations as $\approx$, ", ¿e etc,. for all these demand separate and somewhat lengthy treatment. The reader is referred to the chapter on "Lautlehre" in Junker's Grammatik der Denderatexte ${ }^{2}$ ) which, though in need of some modification and capable of considerable amplification, records much that can also be noted at Edfu
(b) Transliteration ${ }^{3}$ ).-From the moment he commences his studies the student of Ptolemaic texts is faced with

[^5]the urgent and almost insoluble problem of transliteration. Junker in his Grammatik der Denderatexte has in general favoured the historical method, transliterating according to the earliest spellings. Spiegelberg, however, in a review of Junker's work argued that since certain Ptolemaic spellings were clearly made in an attempt to indicate the vocalisation, our transliterations should try to show it $\left(^{1}\right.$ ).

There is much to be said for both points of view, but the problem is not a simple one. It must always be borne in mind that our modern system of transliteration is at best an artificial convention adopted by us for our convenience, but it is not Ancient Egyptian. Transliteration should be our servant but never our master, and our aim should be to evolve a system that combine accuracy with simplicity and utility.

It will probably be conceded that the following conclusions may legitimately be drawn from an analysis of Ptolemaic texts:
(i) The language of the temple inscriptions of the Graeco-Roman Period was to all intents and purposes a dead one, a priestly language, which in many points of signs, spellings and grammar had little relation to the speech and written language of the time $\left({ }^{2}\right)$.
(ii) Though many later elements have crept in, the main fount of inspiration is to be found in texts of the Old

[^6]Kingdom, the Pyramid Texts and even earlier, from which are drawn much of the contents of Ptolemaic texts, their vocabulary, the mechanical processes of writing and even some of the grammar.
(iii) Often the priestly editors consciously attempted to reproduce the historical writings of words without necessarily realising the historical and original sound values.
(iv) Often the priestly editors consciously attempted to give a "modern" form to old words by introducing modifications of signs or alternative signs that gave a clue to the current pronunciation.
(v) Often the priestly editors fell between the two stools and were neither entirely historical nor entirely modern.
(vi) That whatever the priestly editors may bave been, they were never wholly consistent, even in the same text or sentence, and consistency, therefore, does not seem to have been the final or decisive factor,
(vii) That one phonetic value may be represented by several signs or combinations of signs, and, conversely that one sign may represent several phonetic values.

If, therefore, we attempt to transliterate as the word is written or to systematise the transliteration so that it indicates what we know or imagine was the contemporary, vocalisation, we run two dangers. In the first place, we are going to overburden our dictionaries with many words that are really identical ; thes we should have to transliterate and list the verb snd "fear" according to the spellings

as snd, snd,
snty and snt, although in fact only one word is involved. Secondly, though Coptic may guide us to an accurate transliteration of certain words, the proportion of Egyptian words preserved in Coptic is so small that if we attempt to systematise and apply a rigid system designed to represent contemporary vocalisation, we shall often be compelled to make quite arbitrary selections, which often may be quite inaccurate.

With these facts in mind and realising that in any case we are studying an artificial form of language and writing, the safest course seems to be to adopt a formal method of transliteration. For such method the soundest procedure surely is to work on historical lines. At the same time, it seems needlessly pedantic to adopt the oldest and most archaic spellings, is such are available, and therefore with such modifications as may seem desirable, in general along the lines followed by Gardiner in his Egyptian Grammar and by the Wörterbuch.

Nevertheless, it would be wrong to transliterate blindly, without trying to give some idea of what signs may have been omitted or inserted in comparison with the normal, historical writings. This will be done by the liberal use of brackets to indicate both missing and superfluous signs $\left({ }^{( }\right)$. Thus when 倸 is omitted in e $\beta$ " ${ }^{4}\left({ }^{2}\right)$ "praise" I shall transliterate $\operatorname{sw}(3) s$, or if is added, as in व蒀 Ind $\left(^{3}\right)$ "fire, flame", the transliteraton $h(3 w) t$

[^7]indicates both the superfluous 3 and the missing $w$ ，or again in $4 \doteq{ }^{(1)}$＂river＂the transliteration，,$\vec{i}(t w) r$ indicates both its nearness to eroop and its history ${ }^{2}$ ）．On the otherhand，with words like 悘 $\left.{ }^{\prime}{ }^{(3}\right)$＂herds＂it seems wiser to be conservative and write $i(d) r\left({ }^{4}\right)$ ．Similarly， brackets will be employed where other changes are involved，as in ${ }^{(5)} w(3) h$＂garland＂．In certain cases， however，a word is spelled habitually in a way which diverges so much from the early writings that it seems incumbent to transliterate as written，the historical form， if desired，being added in brackets；thus 譣＂open＂is to be transliterated si since 苟口（8）and other writings show clearly that by this time the original reading had been entirely lost．

In considering the alphabetic signs，however，we are faced with further difficulties in transliteration and analy ${ }_{7}$ sis，for there are many cases ip which it is difficult to decide whether a sign is uniliteral or biliteral．This difficulty is particularly evident in certain signs in which及 is one of the elements and one example will serve to illustrate what is of quite frequent occurrence． 2 ，as we shall see，is well authenticated as alphabetic $\underline{L}$ but what

[^8] In the former word the full writing with ${ }^{\text {S }}$ is rare but spel－ lings with－ $\int$ are frequent ；in the latter word my notes do not contain any example in which 晦 is written but W $\prod_{\Delta s^{\circ}}^{\circ}{ }^{3}$ occurs occasionally．The answer to this question will depend largely on individual preference；some there will be who will see in 2 a biliteral sign，while others will be inclined to regard it as monoconsonantal，and a good， case could be made out for either view．I shall trans－ literate，therefore，$\underline{h}(3) b$ and $m s \underline{h}$（3）and leave the question open．I have the personal impression，however，that when，
 final elements in the spellings of words，they are probably always monoconsonantal，even when apparently followed by the phonetic complement 品，and that frequently they are likely to be monoconsonantal when they oocur at the beginning or in the middle of words（ ${ }^{4}$ ）．When confronted by such bordereline cases I have avoided，as far as possible，using them as evidence for the existence of specific alphabetic values and have drawn examples from words where such doubts do not exist．
（c）Signs and Forms．－The signs given in the following list have been taken from the fount in the possession of the Institut Français d＇Archéologie Orientale，since

[^9]this is the most complete and flexible selection of Ptole－ maic signs at present available（ ${ }^{1}$ ）．Naturally，no fount can be perfect，but the Institut＇s fount is so rich that its general accuracy can be relied upon．

During the course of the publication of the Temple of Edfu many new signs and alternative forms of existing signs have been added to the fount．Thus，in the early volumes（113）is employed where the later volumes use 资（1190 b）and in the later volumes（1190） is superseded by（1205b）．No useful purpose seems to be served in distinguishing between such alternative forms and in fact Chassinat does not do so himself（ ${ }^{2}$ ）． Accordingly，in the majority of cases I have employed the more recent examples of such alternative forms and have substituted them for the earlier forms．厤 in all cases is certainly more accurate than 量，but neither nor I accurately reproduces the sign normally used at Edfu． In the following list of signs alternative forms（abbreviated as＂＇alt．＂）and variants（＂var．＂）are carefully distinguished， the former being alternative forms used by the modern printer，whereas the latter are genuine variants used by the ancient scribes themselves．

The signs in the following list are arranged in appro－ ximately the same relative order that they will occupy in

[^10]the final List of Ptolemaic Signs，which however，will employ a different system of numbering．For the sake of convenience they have been numbered serially．In referring to signs included in the present list $I$ have always quoted the serial numbers，preceded by＂No＂（No．1， No． 50 etc．）in order to distinguish them from the catal－ ogue numbers which are added in brackets after the first occurrence of each sign studied．It will be noted that in a few cases the catalogue number is followed by＂mod＂． This convention has been adopted to indicate that the exact form of a given sign does not exist in the fount and that the sign printed is a modified form of the sign that most closely resembles it．Roman numerals refer to the Notes in Section $C$ of this paper．

Both in the Sign List itself and in the more detailed discussion in Sections C and D and attempt has been made to discover the origins of the different alphabetic values and to establish the principles on whioh the ancient sc－ ribes worked．It should be borne in mind，however， that in most cases＂origin＂can only mean＂probable origin and it is difficult to see how it could be otherwise， since we are not ancient Egyptians and have not ourselves written the texts．The scholar today can only collect and classify the data and then make suggestions and inferences which may form，if a sufficient degree of uniformity be forthcoming，the basis of a series of rules which may be put forward with a certain degree of con－ fidence，but absolute，final truth is difficult to obtain in the circumstances．

In searching for the origins of these values I have sou－ ght to find explanations that are simple and direct，since
that seems logical and in keeping with the Egyptian mentality, and explanations that also leave scope for the minimum of alternative derivations and that do not conflict with what we know of Egyptian and with what emerges from a detailed study of the alphabetic signs as a whole. If, for instance, one method of explaining a given value leaves. the possibility of several derivations, while a second method offers only one possible derivation, then the latter is likely to be the correct one. If, furthermore, it is discovered that this method helps to explain a whole series of values, we are justified in suggesting that it formed one of the principles that guided the ancient scribes. Where there is a variety of possible derivations and explanations, no single suggestion can be put forward with confidence and not only have we arrived nowhere but in certain cases doubts must be cast on the accuracy of our decipherment and methods of procedure. In searching for origins, therefore, we must seek the explanation that is exclusive. It is in this spirit that the suggestions embodied in the following sections of this paper have been put forward, and in the belief that each one affords the best explanation in the present state of our knowledge. I am well aware that some of these suggestions are speculv ative and I should be the last person to put them forward dogmatically or with any feeling that in all cases they necessarily represent the last word.

## B.-A LIST OF SIGNS THAT HAVE Alphabetic VAlUES

As a general rule, and in order to save space, only one example of each value is quoted. If a sign is of infrequent use or unique this will be stated; in all other cases
it may be assumed that the value given is well authenticated in a number of examples. In the oases, however, of the figures of human or divine beings that act as suffix pronouns it will be appreciated that their use is strictly specialised and in the majority of cases the value, though certain, only occurs once or twice; it has been thought superfluous to indicate this in the test since the fact must be sufficiently opvious.

This list does not include those isolated signs that exceptionally acquire a particular value owing to genuinc scribal errors that are not habitually repeated. A few errors that are made so frequently as almost to become variants are noted so that the record may be as complete as possible.

Where a given value is of very common occurrence, such as the "normal" alphabetic signs, no references are given. Similarly the words suggested as the origins of the various values are usually so well-known that specific references have been omitted, for the majority of them will be found in the Wörterbuch. References will be quoted for all words that are rare or that are not listed in the Wörterbuch.

Certain aspects of the origins ${ }^{1}$ ) of the values or the values themselves are discussed in the Notes in Section C, to which the Roman numerals refer. The general principles that govern the formation or selection of the alphabetic values are analysed and discussed in Section D.

[^11]It need hardly be added that when in the following pages it is said that any one sign had such and such a val－ ue，it is not necessarily implied in any way that the sign had that specific phonetic value in the Ptolemaic Period， though often it is clear that a sign is used deliberately to indicate some phonetic change or to give a hint as to the vocalisation．It would be more accurate，perhaps，to describe the following list as a record of the signs that in given circumstances could act as substitutes for signs used in the normal，historical spellings of words．

1．
（1746b），alt 소 $_{(1)}^{(1)}$
$i$ ：suff．1st．pers．sing．mase．，very common． Origin：direct representation by extension of the ideographic principle，see further pp．501， 505 below ${ }^{(1)}$ ．
2．A（11）．
$n$ ：in e（IV，156，14）$n w(w)$ ，＂inundation＂ Origin： 77 minn＂to be tired＂．
3．\＄（62）
$f$ ：suff．3rd．pers．sing．masc．，common ；occas－ ionally $f$ in the spelling of words，e．g．$\$ \$ 2$ （I，74， $1=\mathrm{XI}, \mathrm{Pl} .253$ ），wnf，＂to be glad＂ Origin：K $f_{i i}$＂to lift＂．
4．
（618b）var．of No． 3. $f:$ suff．3rd pers．sing．masc．，common．

[^12]5． $5(632 b)$ ，var．of No． 3.
$f$ ：suff．3rd．pers．sing．masc．（IV．119，14）； occasionally $f$ in the spelling of words，e．g． F（IV，94，18），fk－hri，name of a foreign land．See Notes I and XXI．

6．${ }^{4}(627 b)$ ，var．of No 5.
$f$ ：suff．3rd．pers．sing．masc．（IV，12，7）．See Notes I ard XXI．
7． 4 （30）．
$h$ ：in च诸（III，32，13），Pth，＂Ptah＂．Origin昗 ha，＂million＂．

8．$(30+691)$ ，var．of No． 7.
h：in 空垂重（Mam．，57，7），thh（wt），＂joy＂．
Origin：as No． 7.
9．（31），var．of No． 7.
$h$ ：in＂出＂ 4 （IV，17，4）$t h h(w t)$ ，＂joy＂＇Origin： as No． 7.
10．Fin（ 33 mod ），var．of No． 7.
$h$ ：二际（VI，155，4），Pth，＂Ptah＂．Origin：as No． 7.
11．［秋］（452b），var．of No． 7.
h：庶过（VI，272，10），Pth，＂Ptah＂．Origin： as No． 7.

12．$\left(\frac{1}{4}\right.$（38），var．of No． 7.
$h$ ： No． 7.
13． $\mathrm{H}(1539 b)$ ，var．of No．7．
$h:$ in ${ }^{2}$ 㡙其（V，246，16）；Pth，＂Ptah＂．Origin： as No．7．
14． $517(959 b)$ ，var．of No． 7.
 No． 7.
15．oh（ $1282 b$ ）．
＇：only in ato（V，113，2），＇$b$ ，＂boast＂． Origin：＂－$\because$＂bowl＂．
16．年（ 1190 b ），alt．呙）113）
 sacred winged beetle＂．Origin：$\frac{1}{i^{5} 0}$＂e，＂child＂ （Chassinat，Le Temple de Dendara，II，208， 11）．See Note II．
（b）$n$ ：frequently equivalent to $\Omega(\mathrm{VI}, 57,10$ ）， occasionally $=\mathrm{mm}$ in the spelling of words， e．g．望尝（V，229，4），nkn，＂stripling＂． Origin： $8=8$ in $n w$, ＂child＂．See Note 111.
（c）$h$ ：in 耳为帛（IV，392，1）wd $h$ ，＂child＂．Origin：

 8 8－（III，320，1），etc．See Note IV．
 Origin＂忽 $h y$ ，＂child＂．Origin suggested by Drioton in Piankoff，Le Livre du Jour et de la Nuit，104．For is in w and other writings of Khemmis see Note LV．
（e）$s$ ：in（III，25，5），skiz，＂to raise＂．Ori－

（f）$i$ ：suff．1st．pers．sing．masc．（IV，255，4，Hars－ omtus）．Origin ：direct representation．
17．of（1719 b），alt．早）（115），var．of No． 16.
（a）$n$ ：in frequently equivalent to $\Omega$（VII，3，4）．Origin： as No． $16 b$ ．
（b）$h:$ in $y_{A}^{0}$（IV，155，3），$h(3) \underline{h}$ ，＂hasten＂． Origin：as No． 16 d ．
（c）$s:$ in $f_{\text {III }}^{0}$（IV，19，9），$s n$ ，＂their＂（suff．3rd， pers．plural）．Origin ：as No．16e．
（d）$m$ ：once only as preposition（IV，11，4）．Origin： $4=$ imti＂child＂，in Ptolemaïc 1 ＂\＄im （IV，113，13）．
18．多（123）
$m$ ：prep．＂with＂，only example $V, 4,6$ ．Origin： 4 ©＂着 imti＂＂child＂．
19．I（1377b，mod．），var．of No． 18.
$m$ ：prep．＂in＂only V，304，10；VII，4，3．Origin： as No． 18.

20．§（ 578 b ）．
$f:$ suff．3rd．pers．sing．masc．（VI，5，6）．Origin：感通 $f_{3 i}$＂to lift＂。
21．（306），var．of No． 20.
$f$ ：suff．3rd．pers．sing．masc．（III，203，8）．Origin： as No． 20.
22． $\int(592 b)$ ，var．of No． 20.
－$f$ ：suff．3rd．pers．sing．masc．（IV，11，4）．Origin： as No． 20.
23．$A(579 b)$ ，var．of No． 20.
$f:$ suff．3rd．pers．sing．masc．（IV，11，6）．Origin： No． 20.
24．贲（308）。
$f:$ suff．3rd．pers．sing．masc．（V，2，3）．Origin ： as No． 20.
25．（1443 b），var．of No． 24.
$f$ ：suff．3rd．pers．sing．masc．（VII，3，2）．Origin ： as No． 20.
26．\＃（1123 b），var．of No． 24.
$f:$ suff．3rd．pers．sing．masc．（V，6，1）．Origin ： as No． 20.
27．（273b），var．of No． 24.
$f^{f}:$ suff．3rd．pers．sing．masc．（III，88，12）．Origin： as No． 20.

28．T $(334 b)$ ．
$f$ ：suff．3rd．pers．sing．masc．（III，198，19）． Origin ：see Note I．

29．HN（344）．
（a）$i: J+\mathrm{N}=1 \mathrm{~N}$（III，111，3）bik，＂falcon＂． Origin：4 Sh isw，＂old＂．See Note V．
（b） 3 ：only in ${ }^{2}$ ？（IV，199，10） $3 p d w$ ， ＂birds＂，．Origin：phonetic change from the value． attested above
30．次（349）。
 5），bik，＂falcon＂．Origin ：confusion with + ）
31．（325）．
 birth＂．Origin：bs，＂dig up＂．
32．（ 418 mod．）．
$i$ ：suff．1st．pers．sing．masc．（IV，207，10，king） Origin ：direct representation．
33．（ 418 mod．）．var．of No． 32.
$i$ ：suff．1st．pers．sing．masc．（IV，207，10，king）． Origin ：direct representation．
34.」 850 b ），alt． <br>（124）．
（a）$i$ ：suff．1st．pers．sing．masc．；common．Ori－ gin ：direct representation．
（b）$\vec{i}$ ：suff．1st．pers．sing．fem．only in Mam．，82， 11，and VI，54，8．Origin ：error for $\$$ ．
（c）in the combination $\mathbf{\} \mathbf{J} \mathbf{J}$（IV，153，17，the four children of Horus）whioh is equivalent to 11 ，$n$ ，suff．1st，pers．plural．Origin ：direct representation．
35.
(852b), alt. 1 (127), var. of No. 34.
$i:$ suff. 1st. pers. sing. masc.; common. Origin direct representation.
36. $\frac{1}{3}(1552 b)$, alt. $\hat{y}$ (128).
$i$ : suff. 1st. pers. sing. masc. (VII, 252, 2). Origin : direct representation.
37. [f (129).
$i:$ suff. 1st. pers. sing. masc. (IV, 144, 15). Origin direct representaion.
38. (130).
$i$ : suff. 1st. pers. sing. masc. (IV, 228, 9). Urigin: direct representation.
39. 万 (144)
i : suff. 1st. pers. sing. masc. (IV, 195, 6). Origin: direct representation.
40. 1 (145).
$i$ : suff. 1st. pers. sing. masc. (IV, 195, 6). Origin : direct representation.
41. 辛 (146).
$i$ : suff. 1st. pers. sing. masc. (IV, 195, 7). Origin : direct representation.
42. ${ }^{3}(135)$
$i$ : suff. 1st. pers. sing. masc. (IV, 148, 9). Origin: direct representation.
43. $\sqrt{1}(136)$.
$i$ : suff. 1st. pers. sing. masc. (I, $42,5=X I$, pl. 225). Origin : direct representation.
44. fî (137).
$i$ : suff. 1st. pers. sing. masc. (IV, 308, 16). Origin : direct representation.
45. (138)
$i$ : suff. 1st. pers. sing. masc. (IV, 142, 5). Orig. in: direct representation.
46. Y(149)
(a) $i$ : suff. 1st. pers. sing. masc. (I, $42,6=\mathrm{XI}$, pl. 225). Origin direct represenation.
(b) in (IV, 304, 15, king and queen) is equivalent to $\mathrm{m}_{11}^{m} n$, suff. 1st. pers. plural. Origin : direct representation.
47. Y (2446 b).
$i$ : suff. 1st. pers. sing. masc. (IV, 260, 4, Osiris). Origin : direct representation.
48. $\int^{\prime}:(156)$.
(a) $i$ : suff. 1st. pers. sing. masc. (Mam., 192, 4), Origin : direct representation.
(b) $n$ : in $J t$ (genitive, masc., IV, 17, 5). Orig. in: $\operatorname{mon}_{\infty}$ nt. "red crown". See Note VI,
49. 10 (21 a mod.)
$i$ : suff. 1st. pers. sing. masc. (III, 191, 13). Orig. in: direct representation.
50. N
$i$ : suff. 1st. pers. sing. masc. (III, 78, 14). Origin: direct representation.

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51．（22a）
i：sult．1st．pers．sing．mass．（IV，150，11）．Origin direct representation．See Note VIl．

52． $13: 430$ ．
$i:$ suff．Ist．pers．sing mase．（IV，112，16，Atum）． Origin：diruct representation．
53.
（1225 h）．
i：suff．Ist．pers．sing．masc．（VI．65，6，a demon）． Origin ：direct representation．
54．（397）
（a）i：sutf．Ist pers．sing．mast．（［II，142，3，Osiris）． Origin ：direct representation．
（b）on the＂（III，353，13）＂Dendera＂see Note VIII．
55．係（399）
：suti．Jst pers．singe masc．（111，277，7，Osiris）． Origin ：direct representation．
56．1t（692b，mod．）．
$\hat{i}$ ：suff．1st．pers．sing．masc．＂（IV，291，9，Osiris）． Origin ：direct representation．
57．（703 b）
i：suff．Ist．pers．sing．masc．（IV，135，13，Osiris）． Origin：direct representation．
58．角 l）（415）．
$i$ ：suff．Ist．pers．sing．masc．（111，231，11，Ptah）． Origin ：direct representation．
（1）In the original the sceptre is composite，heing made up of $\mathcal{F}$ ．乎 and $\|_{\text {；see }}$ 111，231，note 1．The correct form would appcar to be a meditication of（1394 b）．

59．（415）：
i ：suff．1st．pers．sing．masc．（IV， 142,7, Ptah） Origin ：direct representation．

60．（403）．
1 ：suff．1st．pers．sing．masc．（III，237，4，Amun） Origin ：•direct representation．
61．$H^{3}(1)(411)$ ．
$i$ ：suff．1st．pers．sing．masc．（III，278，3，Min）． Origin ：direct representation．
62．（770b）．
$r$ ：preposition＂to＂（only VI，14，13）．Origin： © an r3，＂snake＂．
63．造（817 b）．
i ：suff．1st．pers．sing．masc．（IV；42，13；195，2）． Origin ：direct representation．
64．（824 b），alt．${ }^{\text {（445）}}$
（a）$i$ ：suff．1st．pers．sing．masc．（VI， 84,3 ）．Ori－ gin：direct representation．
（b）in the group $\mathbf{\} \mathbf{J}$（IV，153，17）equivalent to ${ }_{111}^{m m} n$ ，suff．1st．pers．plural．Origin ：direct representation．
65． 1 （ 902 b ），alt．${ }^{1}$（447）．
（a）$i$ ：suff．1st．pers．sing．masc．（VII，80，2）．Ori－ gin：direct representation．

[^13](b) in the group 1 H (IV, 313, 7, Horus and Hathor), equivalent to $\lim _{1,} n$, suff. Ist. pers. plural (dual). Origin : direct representation.
66. (901 b).
$i$ : suff. 1st. pers. sing. masc. (III, 105, 14). Origin : direct representation.
67. (504 b), alt. (464).
(a) $i$ : suff. 1st. pers. sing. masc. (VI, 5,7 ) Orig. in : direct representation.
(b) in group 1V, 157, 1, Horus and Hathor), equivalent to ${ }_{i 1}, n$, suff. Ist. pers. plural. Origin : direct representation.
(c) on 13 IV (III, 353, 13), "Dendera" see Note VIII. (901b, mod.).
in group (III, 193, 10, Horus and Hathor), equivalent to ${ }_{111} n$, suff. 1st. pers. plural. Orig. in: direct representation.
69.
( ${ }^{1}$ ) ( 461 mod.).
$i$ : suff. 1st. pers. sing. masc. (I, 327, 15, collated). Origin: direct represenation.
70.
${ }^{3}$ (466).
i : suff. 1st. pers. sing. masc. (IV, 311, 2, Harsomtus). Origin : direct representation.
71. (467)
i : suff. 1st. pers. sing. masc. (IV, 340, 6, Mentu). Origin : direct representation.

[^14]72. (2437b).

1 : suff. 1st. pers. sing. masc. (IV, 261, 4, Horus). Origin : direçt representation.
73. 3 (475).
(a) $i$ : suff. 1st. pers. sing. masc. (VI, 84,5 , Thoth). See also Note IX. Origin: direct representation.
(b) $\mathfrak{z}$ : in $]$ (IV, 14, 6) in, particle. Origin: See Note X.
74. 1 (477).
(a) $i$ suff. ist. pers. sing. masc. (VII, 170,8 , Thoth). Origin : direct representation.
(b) $i$ : in (TV (IV, 19, 5), in, Origin: see Note X.
75. (468).
i : suff. 1st. pers. sing. masc. (IV, 143, 3, Khons). Origin : direct representation.
76. $\frac{1}{}$ (489).
(a) $i$ : suff. 1st. pers. sing. masc. (VI, 139, 1, Wepwat). Origin: direct representation.
(b) in the group $\mathbf{1 J}$ (VI, 153, 17, the four children of Horus) equivalent to ${ }_{1} \mathrm{l}, 1$, suff. 1st. pers. plural. Origin : direct representation.
77. 14 (491).
t : suff. 1 st. pers. sing. masc. (VII, 319, 5, Anubis). Origin : direct representation.
78. J (498 mod.).
in the group $\backslash \sqrt{ } \mathbf{y}$ (IV, 153, 17, the four children of Horus) equivalent to ${ }_{11} 1_{1}$, plural. Origin: direct representation.

3 ( 481 mod.$)$.
$i$ : suff. 1st. pers. sing. masc. (Mam., 80, 14, Herishef). Origin : direct representation.
80.

3 (481).
$\vec{i}$ : suff. 1st. pers. sing. masc. (III, 287, 11, Khnum; III, 258, 7, Banebded; Mam., 80, 14, Herishef). Origin : direct representation.
81. (482)
i : suii. ist. pers. sing. masc. (IV, 146, 15, Khnum; I), 303, 1, Banebded). Origin : direct representation.
82. 1 (876 b).
$i$ : suff. 1st. pers. sing. fem. (V, 184, 8). Origin: direct representation. For a discussion of the origin of the use of figures of women and goddesses to represent the suffix pronouns 1 st. and 2nd. pers. singular see below p. 503-505
83. (1992 b), alt. <br>(511).
(a) ǐ: suff. 1st. pers. sing. fem. (III, 253, 8). See also Note XI. Origin : direct representation.
(b) $t$ : suff. 2nd. pers. sing. fem. (VI. 155, 9). Origin: see p. 503-505.
84. If (1749b), alt. If (513).
(a) 2 : suff. 1st. pers. sing. fem. (V, 207, 5). Origin direct representation.
(b) $t$ : suff. 2nd. pers. sing. fem. (VII, 145 13). Origin : see p. 503-505.
(c) in the group $1 \mathbf{H}$ (IV, 313, 7, Horus and Hathor) equivalent to plural. Origin : direct representation.
85. ${ }^{1}$ ( $57 a$, mod.).
$t:$ suff. 2nd. pers. sing. fem. (I, 46, $14=\mathrm{Xl}, \mathrm{Pl}$. 228, Hathor). Origin: see p. 503-505.
86. (1994b), alt. Y (519).
(a) $i$ : suff. 1st. pers. sing. fem. (III, 124, 10). Origin : direct representation.
(b) $t$ : suff. 2nd. pers. sing. fem. (VI, 95, 15). Origin: see p. 503-505.
87. (1750 b), alt. (521).
(a) $i$ : suff. 1st. pers. sing. fem. (V, 141, 9); Origin: direct representation.
(b) $t$ : suff. 2nd. pers. sing. fem. (III, 290, 15). Origin : see p. 503-505.
(c) in the group (IV, 121, 15, Tenenit and lunit) equivalent to $\mathrm{MN}_{11}^{\mathrm{m}}$, suff. 1st. pers. plural. Origin : direct representation.
88. (1474 b, mod.), alt. $\sqrt{\text { I }}$ (591 : mod.)
$n$ : as genitive (V, 205, 6), prep. "to" (IV, 12, 7) or in the particle in (V,2,1). Origin : mm nt, "red crown", or a $\$ N t$, "Neith".
89. (1474 b), alt. ปั (591).
$n$ : in (V, 243, 16) nln $n$, "stripling". Origin : as No. 88.
90. (818b).
i : suff. 1st. pers. sing. fem. (IV, 248, 3, Wadjet). Origin : direct representation.
91. (1456 b).
$n$ : genitive (only V, 304, 6). Origin : as No. 88.
(a) $i$ : suff. 1st. pers. sing. fem. (IV, 372, 6 , queen) Origin : direct representation.
(b) in the group $N \mathbb{N}$ (IV, 304, 15, king and queen) equivalent to ", ", suff. 1st. pers. plural. Origin: direct representation
93. $(772 b)$
$i$ : suff. 1st. pers. sing. fem. (IV, 171, 12, queen) Origin : direct representation.
94. (1) (-)
: suff. 1st. pers. sing. fem. (1, 33, $8=$ XI, Pl. 218 Hathor). Origin : direct representation
95. (581 mod.).
$i$ : suff. 1st. pers. sing. fem. (IV. 147, 14, Nephthys) Origin : direct representation.
96. IJ (581).
(a) $i$ : suff. 1st. pers. sing. fem. (IV. 303, 18, Neph thys). Origin : direct representation.
(b) $t$ : suff. 2nd. pers. sing. fem. (IV. 303, 9, Neph thys). Origin : direct representation.
97. $\left.{ }^{(2}\right)(2502 b$, mod. $)$, alt. ${ }^{5}(604$ mod. $)$
$n:$ in $1 \mathbf{1}$ (IV, 14, 7) in, particle, and also as genitive (IV, 17, 15) and as formative element in sdm.n.f. e.g. 鸟気 (IV, 12, 7) hws.n.f. "he built". Origin : from the phonetic use of 0 as in in $\sigma^{0}$ ink, "I'" or $n w$, in $\delta n w$, "of" if the woman be interpreted as a mere support ; or alternatively from ${ }^{0} \square$, var. $\$ \mathrm{Nwt}$, the goddess

> (1) Not in the fount
preferred to the alternative form.
98.
(1) (2502b), alt. (604)
(a) $n$ : in slim.n.f (III, 104, 15), prep. (IV, 19, 7). Origin : as No. 97.
(b) in (IV, 42, 14, Horus and Hathor) equivalent to, 1, , suff. 2nd. pers. plural. Origin : direct representation.
99. I (576 mod.).
$t$ : suff. 2nd. pers. sing. fem. (III, 119, 11, Hathor). Origin : direct representation, see p. 503-505.
100.
(576).
$i$ : suff. 1st. pers. sing. fem. (Mam., 142, 15, Hathor). Origin : direct representation.
101. (176 b).
(a) $i$ : suff. 1st. pers. sing. fem. (III, 193, 8, Khentiabtet). See Note XII. Origin: direct representation.
(b) t: suff. 2nd. pers. sing, fem. (III, 197, 5, Hathor). Origin : direct representation, see p. 503-504.
102. (177b).
(a) $i$ : suff. 1st. pers. sing. fem. (IV. 42, 10, Hathor). Origin : direct representation.
(b) t : suff. 2 nd . pers. sing. fem. (VII, 141, 13, Hathor). Origin : direct representation, see p. 503505

[^15] preferres to the alternative form.
(c) in group (III, 193, 10, Horus and Khen-
 ral. Origin : direct representation.
103. (176b, mod.).
$i$ : suff. 1st. pers. sing. fem. (I, 37, $14=$ XI, Pl. 221, Hathor). Origin : direct representation.
104. (178b).
$i$ : suff. 1st. pers. sing. fem. (IV, 155,15 , Hathor). Origin : direct representation. See also Note XIII.
105. (67 b).
(a) $i$ : suff. 1st. pers. sing. fem. (IV, 150,1 , Hathor, the normal use; IV, 58, 8, Isis). Origin: direct represenation.
(b) $t$ : suff. 2nd. pers. sing. fem. (III, 17, 17, Hathor), Origin: direct representation, see p. 503-504,
(c) in group (IV, 157, 1, Horus and Hathor) equivalent to ${ }_{111}$, suff. 1st. pers. plural. Origin : direct represenation.
(d) on 1 (III, 353, 13), "Dendera" see Note VIII.
106. ( $178 \mathrm{~b}, \mathrm{mod}$ ).
$i$ : suff. 1st. pers. sing. fem. (I, $46,16=$ XI, PI. 228, Hathor). Origin : direct representation.
107. $\$(584)$.
$i$ : suff. 1st. pers. sing. fem. (IV. 152, 16, Maat). Origit : direct representation.

## (534 h, mod.).

$t$ : suff. 2nd. pers. sing. fem. (VI, 264, 4, Sekhmet). Origin : direct representation, see p. 503-505.
109. (534 b).
(a) $i$ : suff. Ist. pers.' sing. fem. (VI, 263, 17, Sekhmet). Origin : direct representation.
(b) $t$ : suff. 2 nd. pers. sing. fem. (VI, 264, 1, Sekhmet). Origirr : direct representation, see p. 503-505.
110. 3 $(614+691)$.
$i$ : suff. 1st. pers. sing. fem. (IV, 116, 13, Mehit). Origin : direct representation.
111. (29b mod.).
1: suff. 1st. pers. sing. masc. (IV, 129, 10, Mihos). Origin : direct representation.
112. (1014 b).
$\vec{i}$ : suff. 1st. pers. sing. fem. (IV, 144, 17, Tefnet). Origin : direct represenation
113. (642).
(a) $\frac{h}{\text { : only in }}{ }_{1}^{\text {a }}$ III (IV, 126, 4) hnbw, "meadows" but'see also Note XIV. Origin : ${ }^{9}$ hr, "face".
(b) On the writing 9 as a writing of 'Iwnw, "Heliopolis" (I, 294, 14) and 'Iwnt, "Dendera" (V, 368, 9), see Note XV.
114. (693).
(a) $r$ : the usual form, very frequent. Origin: ${ }_{1} r$, "mouth".
（b）as evidence for a possible interchange or con－ fusion between mm and $\leftrightarrow$（indicating the value $l$ ？）compare d $\underline{d r d}$（？$\underline{t r d}$ or $\underline{t n d}$ ）with 2 ．$\underset{\sim}{m i n}(1,1,215,7)$ tud，a word of uncertain meaning designating some sort of weapons．Cf．also No． 304 （c）and
 and many other variants of tnr ．
115．（1806）
$r$ ：very common．Origin ：$\propto$ drawn from a different aspect．
116．$\rightarrow(956 \mathrm{~b})$ ．

 below
117．$A m$（68 a），var．of No． 116.
$p:$ in $(\mathrm{V}, 22,11) H^{\circ} p(i)$ ，＂Nile＂．Origin ： as No． 116.
118．．．．．．（878），var．of No． 117.
$p:$ in $48 \pi(I V, 280,10)$ irp，＂wine＂． Origin ：as No． 116.
119．$\cdots \gg$（ 878 mod．），var．of No． 116.
$p:$ in $\cdots(\mathrm{I}, 22,12$ ，left side $=\mathrm{XI}, \mathrm{Pl} .215)$ $p w$ ．Origin：as No． 116.
120．（69 a，mod．），var．of No． 116.
$p:$ in 3 3．（ $\mathrm{V}, 298,10$ ）irp，＂wine＂．Orig． in ：as No． 116.

121．$\lfloor(749)$ ，alt．$\lfloor(1558 b), \sqcup(985 b)$ ．
（a）$k$ ：in $\frac{\mathrm{L}}{\mathrm{H} \pi}(\mathrm{I}, 41,7=\mathrm{XI}, \mathrm{Pl} .223) \mathrm{kim}$ ，＂gold＂． Origin ：ப $k_{3}$＂soul，spirit＂．
（b）$k:$ in ${ }^{\omega} 山^{\infty}$（VIII，130，14），＇rk，＂com－ plete＂．Origin ：phonetic change．
122．$\Omega$（745）．
$n$ ：usually to express the negative，very rarely in the spelling of words，e．g． 0 ，（IV，303，1） tfn，＂be glad＂．Origin：$\Omega \mathrm{m} n$ ，＂not＂，cf， Gunn，Studies，Chap． 9.
123．（744），var．of No． 122
$n$ ：as negative，$\Omega$（III，1，14）．Origin：as No． 122.
124. （709 b），var．of No． 122.
$n$ ：as negative，$\Omega$（IV，42，4）．Origin ：as No．122．
125． $\int_{(689 \mathrm{~b}), \text { var，of No．} 122 .}$
$n$ ：as negative，$\Omega(\mathrm{V}, 209,16)$ ．Origin ：as No． 122.
126．入（186 h），var．of No． 122. $n$ ：as negative，$\Omega$（III，83，6）．Origin：as No． 122.
127．．（701）
（a）＇：very common．Origin ：＂e＂arm＂．
（b） 3 ：only in $]$（IV，298，13）b3h，＂phal－ lus＂， 8 二小（III，320，1，of．III，319，12） ！isw，＂youths＂；cf．$\quad$（III，100，11） $h t n b * h(3)$ ，＂all the panoply of war＂．Origin ： see Note IV．
(c) $m:$ in च备 (III, 131, 9) sm , "swallow" See Note XVI. Origin: $\mid \boldsymbol{A} \in$ imi, "give". $\simeq$ being a substitute for - . Hence $ـ$ almost, if not entirely, ceases to have any phonetic significance in such words as \# (IV, 293, 9) mds, "slay" cf. IV, 117, 5.
128. (730).
(a) ${ }^{c}$ : rare, e.g. in $(\mathrm{V}, 253,6) \mathrm{dr} r^{-}$, "long ago". Origin by confusion with $\quad$.
(b) $t$ : only in $\quad L_{000}(\mathrm{~V}, 302,3) t h$, "drunkenness" and $(\mathrm{V}, 301,6)$, Mnt, a form of Sekhmet. Origin : from $A d_{i}$, "give". by phonetic change.
129.
': only in (IV, 128, 8) 'wn, "rob". Origin: "- "bowl".
130.
(736)
$m:$ in $\quad$ a $\quad(I V, 126,1) \mathrm{m}(w) t$, "mother." Origin : see No. 127 (c).
131. (735)
$m$ : only in $-\quad$ (VIII, 8, 4) $m(w) t$, "motber".

$$
\text { Origin : see No. } 127 \text { (c). }
$$

132. $\sim$ (779).
(a) $d$ : the usual value, very common. Origin : from the old Semitic word yad, "hand" (Z.̈̈A,S., 50, 91-99).
(b) $t$ in (VI, 55,6) tkn, approach ". Origin : phonetic change.
(c) $t$ : in (II, 31, $6=$ XII, Pl. 369) snt, "foundation" Origin : phonetic change.
(d) $\underset{d}{ }$ : in $(11,37,15)$ dmd, "unite". Origin: phonetic cbange.
133. $\Rightarrow$ (248b), infrequent var. $\rightleftharpoons(862)$. $m$ : only in ! (VI, 297, 17; 304, 11) $\mathrm{fm}(3)$-, '"strong of arm". See also Note XVII. Origin: © mt, "phallus".
134. I (798).
(a) $b$ : the normal and common value. Origin: IS $b w$, "place". (cf. Sethe, Der Ursprung des Alphabets 152).
(b) $p:$ in $4 \Phi \sqrt{\square}(M a m ., 77,10)$ igp, "storm". Origin : phonetic change.
(c) $m$ : only in $\int \mathbb{C}^{\circ} \rightleftharpoons(\mathrm{lV}, 270,8) m t_{3}$, phal. lus', tut see also Notes XVIII, XXXV and LV. Origin : phonetic change.
135. f (801).
$b:$ infrequent, e.g. $f$ fo $\left.\uparrow(\mathrm{VII}, 292,10)^{\prime} b()^{\circ}\right) b$ for ' $b b$ ), "harpoon". Origin: false reduplication, see Note XIX.
136. $\triangle(169 b)$.
$r$ : in 号 (IV, 230, 14) pr, "come forth". Origin : $\Theta_{1}: r$, "mouth". See also Note XX.
137. $\bar{\Lambda}(914 b)$.
 im, "rib", cf. No. 166 (a).

138． $\bar{\Lambda}(3540+825)$ ．
$m$ ：＂only noted in $\Longleftrightarrow \bar{\Lambda}$（VIII，7，4）inm，＂turn back＂．Origin：as No． 137.
139．（850）．
$s:$ only noted in ＂walk＂．Origin：我感 $\wedge$ s $m$ ，＂go＂，see also Note XXI．
140．J（912 b）．
$s:$ in $2 \pi$（ $\mathrm{V}, 221,1) \mathrm{ms}$ ，＂bring＂．Origin ： $s$ ，＂bolt＂，cf．$\pi$ sì，＂perish＂．See Note XXI．

141．ঔ（38 b）var．気（855，the correct form is some what different）．
$s:$ in tht（I．487， $16=$ XII，PI．357）$m s$ ， ＂bring＂．Jrigin ：confusion with $\pi \jmath_{\wedge}$ $s b l$ ，＂go，lead＂，cf．Erman in Z．̈．A．S．，48，31－47．
142．（847）．
$\underline{t}$ ：in $\int \mathbb{J}(\mathrm{lV}, 364,2) b \underline{t}$ ，＂hasten＂．Origin ：解 it，＂seize＂，cf．No．294（a）．
143． $\int$（ 830 ）．
$n$ ：only in $\AA$ fon $(\mathrm{V}, 7,3) n h t$ ，＂might＂and S－4（V，7，3）ňs，＂power＂．Origin：A in，＂bring＂．
144．Vman（962）．
$m$ ：prep．＂in＂（IV，17，12）．Origin ：
$m r t$ ，＂black cow＂．See Note XXII．
${ }^{(1)}$ Mariette，Dendérah，IV，37， 61 ．

145．（952）
（a）$m$ ：rare in the spelling of words，$=[$（IV， $68,1) s m n$ ，＂establish＂．and usually the pre－ position $m$（IV，17，14）．Origin：$\left.\varnothing \square{ }^{\square}\right)^{(1)}$ $m r$ ，＂bull＂．See Note XXII．
（b） k ：in（VII，21，3，$k k(w)$＂darkness＂． Origin：山岁＂bull＂．
（c）$k:$ in 然暴（V，267，16），kn，＂valour＂。 Origin ：phonetic change．
146．Kos（2108 b），alt．（974）．
$b:$ in（VII，5，3）$g b(t)$ ，＂heaven＂．Origin裙 ${ }^{2}$＂ram＂．
147．iss（937）．
$m$ ：once only as prep．＂in＂（IV，17，6）．Origin ： confusion with See Note XXIII．
148．$\rightarrow(925 \mathrm{~b})$ ，alt（924）．
$\boldsymbol{r}$ ：in $\boldsymbol{r}$ 。 Origin：$<\boldsymbol{\$ w}$ ，＂lion＂．See also Note XXIV．
149．An（2499 b）．
$r$ ：in 䇾，（VIII，101，15）Tırr，＂Dendera＂． Origin：confusion with s．
150．A（ 173 b ）．
$r$ ：prep．$r$ ，＂to＂（IV，11，11）．Origin ：confusion with as．
151．（ 933 mod ）．
$n$ ：as $n$ ，genitive（III，105，18）．Origin ：${ }_{\sim}^{m m}$ $n t$ ，＂red crown＂．

[^16]152．）（915）
$m$ ：prep．$m$（VI，281，14），Origin：子 mi，＂lion＂．

153．组（914）．
$m$ ：prep，$m$（VIII，93，6）．Origin：f0 is miw． ＂cat＂．but see Note XXV．
154． $3(84 a)$ ．
（a） $\mathfrak{i}$ ：in A！（III，158，16）${ }^{\text {itn，＂sun＇s disk＂．See }}$ also Note XXVI．Origin ：rebus from 47 io ＂Thoth＂；see Note XXVII．Cf．Note x．
（b）$s:$ in $\boldsymbol{\ell} \mathbb{N}(V I, 1,16) s h d$, ＂illumine＂．Orig－ in ： $\mathbb{A},(\mathrm{VI}, 144,1) s(\hat{i}) s$ ，an epithet of Thoth （cf．Boylan，Thoth，59，90，102－6，195，215）． See Note XXVIII．
（c）$d$ ：in $\boldsymbol{1}$ ： 14 （VII，6，2）d（3）isw，divine bsings；frequently equivalent to $d(d)$ ，＂say＂ （VI，111，3）．Origin：see Note XXIX．

155． 3 （85a mod．）．
$n$ ：as genitive，only noted in $V, 312,2$ ．Origin： from the phonetic value in in ${ }^{0}$ ink，＂ 1 ＂or $n w$ in ${ }^{\circ} n w$ ，＂of＂．

156．SS（ 513 b ），alt．\％A（906）
i：y月才 3 （VII，8，4）irp，＂wine＂．Origin ： as No． 154 a．This sign is used much less frequen－ tly than No． 154.
157．（1038）．
$h$ ：only noted in $\xlongequal[=]{(V, 301, ~ 6) ~ b h n, ~ " s l a y ", ~}$ but see Note XXX．Origin ：In hat，＂front＂．

158．（3032）
$h$ ：in ；管（VlI，128，11）$\pi_{0}^{\circ} w$ ，＂flesh＂，infrequent． Origin：40 $h_{3}$ ，＂front＂．
159．（1091）．
$h$ ：in＂年（VI，5，8）gmh，＂behold＂．Origin： cf． $11=h w$ ，＂food＂．See Additional Note 2 on p． 496.
160．～（1107）．var．（1108）．
＇$:$ in（ $\mathrm{V}, 304,12$ ）$\%$＂cedar＂．Origin ： substitute for ــ＂，＂arm＂，cf．Drioton，L＇Ecri－ ture énigmatique in Piankoff，Le livre du Jour et de la Nuit，p． 100 and Note XXXI below．
161，T（1117）．
$\underline{h}$ ：only in $\boldsymbol{T} \mid(\mathrm{III}, 43,15) \underline{h}(y) t$ ，＂pillar，colump＂． Origin ：error for or related sign．
162．洪（981）．
$m$ ：only in $(111,211,8) m 8$ ，＂evening＂． Origin：im（i），＂in＂．See Note XXXII．
163．（502 b），alt．（859）
（a）$\underline{h}$ ：the normal value common．Origin ：＊－ ht，＂belly，body＂．
（b）$\underline{h}:$ in $\| . Y^{(V, 305,3)}$ he，＂throat＂．Origin ： phonetic change．
（c）$h:$ in $7_{-\square}^{*-}(\mathrm{I}, 327,15$ ，collated）$h(w) t$－ntr， ＂temple＂．Origin：phonetic change．
164．（3322）．
 sbn，＂mix，mingle＂，and $\boldsymbol{F}^{\circ} . .(\mathrm{V}, 75,6)$ bis， ＂copper＂．Origin ：$₹ i b$ ，＂heart＂．
(b) $p:$ in $0 \rightarrow \square(\mathrm{~V}, 251,10)$ tpht, "cavern".
Origin : phonetic change. See Note XXXIII.
165.
(3162).
$f:$ suff. 3rd. pers. sing. masc. (V, 7, 3; 312, 2). Origin : uncertain, see Note XXXIV.
166. $=(3540)$.
(a) $m$ : the normal value, common. Origin : 4 = im, "rib", cf. $Z A_{0} S, 64,9-12$.
(b) $n: \mathrm{i} 4$ (IV, 344, 2) ins, "red cloth". Origin : phonetic change.
 slaughter". Origin : phonetic change : see also Note XXXV.
167. Q (1149), var, $\rho(1150)$; alt. $\rho(1148)$ and $\rho(158 b)$.
(a) $f$ : in (III, 7, 2) hf, "see" common as suff. 3rd. pers. sing. masc. Origin: 8 $i w f$, "flesh", see Note XXXVI.
(b) $w:$ in ${ }_{1}^{\ell}(\mathrm{V}, 112,12) w$, "district". Origin: confusion with e, see Note XXXVI.
168. (1162).
(a) 3: the normal value, common. Origin: A '* "vulture".
(b) $i:{ }^{1} \mathbb{N}$ (VI, 11, 8) bik, "falcon". Origin: phonetic change.
 cribe". Origin: phonetic change, cf. Note IV.
169. ( 337 b), var. of No. 168.
 (III 355,$3 ; 332,3$ ), usually written $\mathbf{N}^{\prime \prime}\left(\mathrm{VI}_{\text {, }}\right.$ 121, 7). Origin : as No. 168 (a).
170. . ( 1205 b), alt. .A ( 1190 ).
 in : $\boldsymbol{\wedge} b_{3}$, "soul", see Note XXXVII.
(b) $p:$ in $\mathbf{H} \boldsymbol{A}$ (VIII, 110, 15; cf. IV, 14, 4; VII, 5,7 ) hrw pn nfr "this happy day". See Note XXXVIII. Origin : phonetic change.
171. (1920 b).
$b:$ in (VII, 10, 7) B, an epithet of Seth: (VII, 24, 12) b(i)k "falcon", Origin : +N $b_{3}$, "soul", see Note XXXVII.
172. ( 1296 b).
$n$ : negative, $\_$, sole example VIIl, 5, 7. Origin: A ntr, "god", or $n b$, "lord". See Note XXXIX.
173. (1260).
(a) $m$ : the normal value, common. Origin: from word for "owl" surviving in,amoүлАх, of which the Demotic form; smwld, would appear to suggest an original $3 m$ (see Sethe, Der Ursprung des Alphabets, 153).
(b) $n$ :as preposition (VII, 192, 16). Origin: phonetic change.
174. H (1270).
$m:$ in (II, 32,2 = XII, Pl. 374) $m d s$, "slay". Origin: 4 © imi, "give", cf. : No. 127 (c).
175. (1269).
(a) $m$ :in (VII, 4, 3) $d_{3} m w$, "generations". Origin: as No. 173 (a), but of. Note XL
(b) for the use oif thinis sign as $n m$, ( $n$ ) $m$ in such words as - (IV, 138, 11) hnmty (h(n)mty), "nostril:" see Note XL.
176. X (1272 b), var, (1450).
$(a) m:$ in $\rightarrow(\mathrm{V}, 48,3) \mathrm{ksm}$, "violate, attack'. Origin : derived from hieratic form of No. 173
(b) $n$ : perhaps in $4 \backslash \cap \square(\mathrm{VI}, 68,2)$ int (?), "wall", Origin : phonetic change. But see Additional Note 5 on p. 498-499.
177. I (1267b).
 Origin : see No. 174.
178. D (1250).
$m$ : in AY: (VIII, 73, 2) bnm, "jasper". Origin: mwt, "mother". See Note XLI.
179. I (1306).
$l$ : not common; in $\frac{\lambda}{\infty}$ (IV, 14, 7) in particle. Origin : $19 i$, "Thoth". Sse Note XXVII.
180. In (1330)
 Origin: 登 $b_{3}$ "soul".
181. T ( 47 b$)$.
 Origin: as No. 180, see Note XLIl.
182. A (1351).
$b$ : in $\mathbf{T}^{\boldsymbol{T}} \mathbf{N}(\mathrm{V}, 223,6)(b$ (i) $k t$, "female falcon". Origin: as No. 180, see Note XLIl.
(21 b).
(a) $t$ : in (IV, 17, 9) the "be drunk". Origin: var. of $\lambda$ tyw.
(b) $\underline{t}$ : only in $\mathbf{N} \boldsymbol{y}_{.}^{\circ}$ (IV, 155,3 ) $t h n_{n}$ "faience". Orıgin : phonetic change.
184. (46 b), var. of No. 181.
$t:$ in "verdant" (Old Perfective), \$M being for the more usual ${ }_{0}^{\complement}(c f . \operatorname{IV}, 125,4)$ where is used similarly). Origin: as No. 183 (a).
185: (1377).
(a) $w$ : apparently only in spellings of the name of Osiris, $\}$ Origin : unknown. See Note XLIII.
(b) $r:$ in $43_{\substack{0 \\ 0}}^{\circ}$ (IV, 19, 6) irp, "wine". Origin: Q \% $r 3$ "goose".
(c) $s:$ in (VIII, 48, 3) swr, "make great". Origin: $\boldsymbol{\|} s$, "goose".
186. 2
(a) $p$ : in 2p (V) 202, 2) Pwnt "Punt". Origin: cf. $\square$ 县 p, "fly".
（b）$h$ ：in（IV，162，4）$h y$ ，＂heaven＂，a rare writing of No also Note XLIV． Origin： $\mathbb{A})_{11!}$（VI，237， 2 and often）hyw hzyw），＂birds＂．
187．（1283）．
（a）$w$ ：the normal value，common，Origin ：un－ known．
（b）in combination with 4 in 4．reads $r$（e），a common use．Origin ：phonetic change．

（a）$\underline{t}$ ：in $2{ }^{2}(\mathrm{VI}, 297,17) \underline{t m(3)-}$ ，＂strong of arm＂．Origin：炎 $t_{3}$＂fledgling＂．
 ＂aggressive Ba ＂．Origin ：phonetic change．
（c）d：infrequent，in 十务（V，299，15） $p\left({ }^{3}\right)^{\circ} d \mathrm{r}$ ，an epithet of Amun．Origin ：phonetic change．
189．$\beta$（1465），var．\＆（1464）．
（a）$s:$ in $\beta$ A $Б$（III， 85,2 ）$s y m ~(~ t) ~(o l d ~ s m y t), ~$ ＂corridor＂．See also Note XLV．Origin ：$\beta_{1}^{\circ}$ sst，＂feather＂．
（b）$k$ ：in $\beta \hat{A}(\mathrm{~V}, 242,2) \underline{d}$ ，＂fire＂．Origin ：phone－ tic change．
（c）$r$ ：only noted in $\beta \leftrightarrow d(\mathrm{~V}, 217,18) r(w) d$ ， ＂flourish＂and $\beta \rightarrow(\mathrm{V}, 217,18) r k$ ，＂time， period＂．Origin ：see Note XLVI．
（d）${ }^{c} \because$ once only in $\mathrm{P} \rho_{0}$ of（VI，77，10）＇$p y$ ， ＂flutter，hop＂（？）．Origin：substitute for ＂arm＂，see Note XLVII．
（e）$i$ ：only in（VII，83，9）mi，＂like＂and 84am on（VI，108，4）mi is $n(t)$ iw， ＂like him whom Shu yomited＂．Origin：error for 4 ．
190．$\quad$（1045 b）．
$n$ ：for negative，$\_(\mathrm{V}, 146,11)$ ．Origin：confusion with $\Omega$ ，see Note XLVIII．
191.
（a）$s:$ in （IV，13，4）psd，＂shine＂．Origin： 0 ， －泰 $s 3$ ，＂son＂，see Note XLIX．
（b）$h$ ：once only in $0_{0}^{\mathrm{mm}}$ e ＂praise＂．Origin ：error for $\triangleright$ ．

192．（1508）．
（a）$f$ ：the normal value，common．Origin ：see Mr．Grdseloff＇s Appendix．p． 533.
（b）$t$ ：only in＂（VI，112，5）hftyw，＂ene mies＂．Origin ：©（i）t，＂father＂，see Mr． Grdseloff＇s Appendix，pp．534－542．
193．（1522）．
（a）$\underline{d}$ ：the normal value，common．Origin：， walt，＂snake＂．
（b）$d$ ：in ${ }^{2}$ ．AM（VI，57，9）dmd，＂unite＂． Origin：phonetic change．
（c）！：only noted $\rightarrow$（IV，14，5）snt，＂founda－ tion＂．Origin：phonetic change．
（d）$t$ ：in $\boldsymbol{A} \backslash 7 \mathbf{1}$（IV，113，17）itm，＂Atum＂． Origin ：phonetic change．
（e）$s$ ：apparently restricted to the not uncommon writings 気（I，42， $11=\mathrm{XI}$, Pl．225） $\underline{d} s r$＂holy，private＂，and $d s f$＂himself＂（I，412， 5）．Origin（VII，205，10）siz，＂snake＂， see Note L．
（f）$r$ ：apparently restricted to dsr（see above） and to writings such as（V）．（VI，279，6） ${ }^{t_{3}} d r . f$（for $t_{3} r-d r . f$ ），＂the whole earth＂， Origin：${ }^{-}$2 r3，＂snake＂．
（g）$f$ ：apparently restricted to writings of－ （VI，279，6）ts $\underline{d r}$ ．f，＂the whole earth＂录ì （I，412，5）$d \underline{d} f$ ，＂himself＂．Origin ：variant of $x_{0}$ ．
194．2a（535b），var．O（1971b）， $70(2111 b), ข 00 \Omega(546 b)$ ； $0 \Omega$ is the form most frequently used．
（a）$r:$ in 4 20a 8 B（IV，19，2），irt $(t)$ ，＂milk＂． Origin：Trar $r^{3}$ ，＂snake＂．
（b）$s$ ：only in 000 （VIII，107，14）ws（i）r， ＂Osiris＂．Origin $3 \pi$ siz，＂snake＂，see Note L．
195．Ô（1535）．
（a）$k$ ：very common as suff． 2 nd ．pers．sing．masc．， and in the spelling of words，e．g．\＆\＆ $\mathrm{o}_{0}^{\mathrm{mm}}$ （VIII，140，9）$\cdot \overrightarrow{k n}$ ，＂unguent＂Origin ：$\rightarrow$（h） $k t$ ，＂uraeus＂，
（b）$g$ ：in 16 （III，191，5）$d g$ ，＂see＂．Ori－ gin ：phonetic change．
（c）$r$ ：once only in $h(11 I, 158,16) r m n$ ， ＂raise＂．Origin ：see Note LI．
（d）＇：only certain in ${ }_{\square}^{8}(\mathrm{C} \varnothing$（IV，6，8）hic，＂cor－ onation festival＂（see Liv．Annals，25，137）but possibly also in（h）（III，207，13）where the reading＂，＂moon＂is perhaps to be preferred to $i_{3} b{ }^{2}$ ．For two clear examples of this usage at Dendera cf．Dümichen，Baugeschichte des Denderatempels，XVII，11．12．Origin ：see Note LII．
（e）$A_{h}$ is sometimes used wrongly for $\Delta$ in $G G$ （V，202，2）wnm，＂eat＂，through misunder－ standing of the origin．
196. G（2015b）．
$n$ ：once only as equivalent of $\Omega$（VII，4，3）． Origin ：uncertain，see Note LIII．
197.

6（608 b）．
$n:$ once as equivalent of negative $\Omega$（IV，11，11）． Origin ：uncertain，see Note LIII．

198．$\longrightarrow(945 \mathrm{~b})$ ．
 Origin：A $\underline{h}_{3} t$ ，＂oxyrhynchus＂．
 $\xrightarrow{h r w}$ ，＂disprove，find guilty＂（the opposite of
 change．
199．（911 b）。
$t$ ：in $\xlongequal{N}(\mathrm{~V}, 4,4) \mathrm{htm}$ ，＂seal＂．Origin：蛤， t3，＂earth＂，see Note LIV．

200．收（1603）．
For a possible alphabetic use of this sign see Note LV．
201．（281 b）．
$\underline{h}$ ：in（III，298，14）（i）ht $n b$ ，＂everything＂．
 see Note LVI
202．（（1657）．
$m$ ：often as prep．$m(\mathrm{~V}, 4,3)$ ．Origin ： $4>8$ im3，＂date－palm＂．
203．（1752）
For the use of this sign in（VI，298，9） $h b$（ 3 h －bit），＂Khemmis＂，see Note LV．
204．$\rightarrow$（1665）．
$m$ ：occasionally as prep．$m$（III，124，12）．Origin：

205．11才（1728）．
$s:$ in itw $^{\prime} \uparrow$ A（III，137，10）$s m(w)$ ，＂fire＂．Origin：迪中 플＂meadow＂．
206．｜fll（1851 b），var．of No． 205.
；：in 1 （VIII，167，16） $3 \mathrm{~s}^{\text {s }}$ ，epithet of Seth． Origin ：as No． 205.
207．山！屯（ 1331 b），var．of No． 205.
 as No． 205.
208.
（1S1 a），var．－（1072 b），
（a）$n$ ：noted once only as genitive（ $\mathrm{V}, 256,6$ ）； occurs occassionally as negative（ $\mathrm{V}, 43,2$ ）． Origin ：see Note LVII．
（b）$i:$ once only in ${\underset{\sigma}{0}}_{0}^{0}($ IV，199，7） itn ，＂sun＇s disk＂．Origin：error for 4.

（a）$\frac{h}{}$ ：in ${ }^{2}$（V，149，5）hnm，＂odour＂Origin： I ：h3w，＂leaves＂．
（b）$\underline{h}$ ：in ${ }^{P} \lambda(\mathrm{IV}, 209,10) \underline{h} m s$ ，bow．down＇．Origin： phonetic change．
210．f（587 b），var．of No． 209.
（a）$h:$ in $7\left\{\left\{\AA^{N}(\right.\right.$ IV，11，4）hyt，＂heaven＂． Origin ：as No． 209 a

211．S（1210b），var．e（ 1628 b）．
$h:$ in $3 \downarrow(V, 219,14) n b b$ ，＂lotus＂．Origin ： as head of same origin as No．209a．
212．（ 493 bj ，var．of No． 211.
$\underline{k}$ ：in $\| \prod_{\text {e }}(\mathrm{V}, 213,9) m s h(3)$＂be glad＂． Origin：as No． 211.
213．（ 155 a$)$ ，var．of No． 211.
$\underline{k}$ ：in we（VII，205，3）$k(3) w(t)$ ，＂altar＂． Origin ：as No． 211.
214．（ 1667 b），var．of No． 211.
$k$ ：only in $\mathbf{G}^{7}=(\mathrm{VI}, 222,1.7) k(3) \mathrm{p}$ ，＂ene－ my（as ani epithet of Seth，the＂enemy＂of Osiris）．Origin ：phonetic change，see Note LVIII．
215． 8 （3050）．
 $254,1) m s t(\hat{z})$ ，＂descendant，image＂．Ori－ gin：by phonetic change from \＆f1 wad，＂papy－
 ＂primeval ones＂

216．新（1718）
（a）$h$ ：in it：（III，180，9）tpht，＇cavern Origin：cf．A A var．存 $h_{3}$＂would that＇＇，see Gardiner，Grammar，Sign list M． 16.
 Origin ：©
（c）For the use of this sign in（III，193，3） ＂Khemmis＂，see Note LV．
217．析（1720）．
（a）$h$ ：in $\mathbb{\Psi} \prod^{m}(\mathrm{IV}, 200,11) h b s$ ，＂clothe＂． Origin：substitute for No． 216.
＇b）For the use of this sign in $68(\mathrm{l}, 209,9)$ ＂Khemmis＂，see Note LV．
218．（1721）．
（a）$h$ ：only noted in $4(\mathrm{~V}, 25,14) i d h$ ，＇swa－ mps of the Delta＂．Origin ：as No． $216 a$ ，as variant of No． 216.
（b）For the use of this sign in ＂Khemmis＂，see Note LV．
219．（1799）．
（a）$i$ ：the normal value，very common．Hence frequently used as suff．1st．pers．sing．masc． （III，26，17）and not infrequently as suff．1st．
 ＂reeds＂．
（b）$i$ ：in $\$ 9$（III，10，19）＂Thoth＂，through mis－ understanding of hieratic form of 3 ，see Notes $X$ and XXVII．
（c） $3:$ in $4=(\mathrm{V}, 27,2) 3 m$ ，＂grasp＂．Origin ： phonetic change．
（d）$r$ ：in combination with ore， 4 is equiva－ lent to $\mathrm{r}(\epsilon)(\mathrm{VIII}, 18,4)$ but in vol．VIII 4 alone is frequently equivalent to r （VIII，54，2）， hence of replaces $r$ in（11：（III，91，1） $n p$（r），＂corn＂．Origin：phonetic change．
$(e)^{\circ}$ ：regularly replaces $\sim$ in $4_{\Delta \Lambda}^{m m}($ IV，364，2） ＇$n k$ ，＂come＂lead；noted once in $\{$ ， （II，219， $1=$ XII，PI．389）＇ntyw，＂myrrh＂which． however，may be an error for $\$-$ Origin ：phonetic change．
$(f)$ On the supposed value $\boldsymbol{h}$ for his sign see Note LIX．
（g）$b$ ：once only in ：$b^{\text {cr }}$（cf．var．IV，183，10）＂pool of Baal．＂ Origin：error for $\mathcal{f}$ ．
220，0000（ $440{ }^{\circ} \mathrm{b}$ ）．
$w$ ：only in spellings of the name of Osiris AROM纪解通（IV，291，10）ws（i）r．Origin： unknown but see Note LX．
221． 7
（491a），7 var．（1685）．
When doubled 77 reads $n n$ in $\overrightarrow{77}$ ］（IV， 39，11）snn，＂image＂．Origin ： $7^{1}{ }_{a}^{10}$ ont， ＂rushes＂，see Note LXI．
222． $\mathcal{F}$（1686）．
（a）$s$ ：in $\ddagger \underline{1}$（VIII，146，3）$t(\hat{i}) s$ ，＂sit＂．Ori－＂ gin：$\ddagger_{1}^{0}$ swt，＂the swt－plant．
（b）$n$ ：when doubled reads $n n$ in $\boldsymbol{1}$（111，34，11） $n n(i)$ ，＂be tired＂．Origin：confusion with No．221， see also Note LXI．

428
223．$₹(1703)$ ，var．$\neq(1752 \mathrm{~b})$ ．
$n$ ：when doubled reads $n n$ in $\eta(V, 305,3) n n$ ， ＂these＂．Origin：var．of No．222，cf．No． 222 b and Note LXI．

224．- （1869）．
$p$ ：in $\square_{\square}(\mathrm{V}, 4,5) p^{c} p^{c}$ ，＂adorn，decor－ ate＂．Origin ：$\square p t$ ，＂heaven＂．

225．$O$（3611）．
$\underline{h}$ ：in ${ }^{\circ}+H_{A}(\mathrm{~V}, 221,17) n h h^{\prime}$ ，grow old＂．Origin： confusion with $\Theta$ ．

226．（1903）．
$w$ ：once only in $1^{\text {ras }}=$（VI，225，2） $\mathrm{tr}_{2}$＂river＂． Origin ：error for e．
（166a）．


228．）（1933）．
$i:$ in $)_{o}^{m u}(\mathrm{~V}, 300,16) \mathrm{I}(w) n t$ ，＂Dendera＂． Origin：rebus from 49 ＂Thoth＂，see Note XXVII．
229．（1929），var．of No． 228.
$i$ ：in $\overline{\bar{\top}}(\mathrm{V}, 216,4) \quad \mathrm{I}(w) n w$ ，＂Heliopolis＂． Origin：as No． 228.
230．－（30b），var：（1944）．
（a）$t$ ：in $\Phi$（IV，231，4） lmt ，＂harpoon＂． Origin ：$\prod_{=1} t 3$ ，＂land，earth＂．
（b）$\underline{t}$ ：rare，in $\{$ unt十 （IV，19，2） $\operatorname{irt}(t)$ ，＂milk＂． Origin ：phonetic ohange．
（c）d：in（VI，227，11）is $d$ ，＂persea＂． Origin ：phonetic change．
231．$\cdots(30 b+1948)$ ，var．$-(30 b$, mod．$), \mp(30 b$ ． mod．），all var．of No． 230.
（a）$t$ ：in（ Origin ：as No． $230 a$.
（b）$d$ ：in ${ }^{2}$ ill $(V, 295,16) i d h w$ ，＂Delta marshes＂． Origin：phonetic change．
232．－（1268 b），var．of No． 228.
$\underline{t}$ ：only in＝1（VI，239，15）tt，＂altar＂。 Origin ：as No． 230 b，cf． 234.
233．（1942），var．$\circlearrowleft$（2021）．
（a）$i:$ in（VI，70，4）$i p w$＂Panopolis＂．Origin＂ －iw，＂island＂．
（b）$h:$ in $A:(V, 122,7) h s b d$ ，＂lapis lazuli＂ Origin：＂e sht，＂horizon＂．
234．（1942）．
Replaces $\underline{t}$ in ${ }^{-}$）興（V，210，4）$t t$ ，＂altar＂． Origin ：variant of No．230，cf． 232.
235．
（a）$n$ ：infrequent，in（IV，358，13）nb ntt， ＂lord of what exists＂．Origin：variant of mm ．
（b）$i$ ：only noted in spellings of $\Longrightarrow$（IV， 32，5）ity，the＇river＇of the Heliopolitan nome． Origin ：confusion with－No． $233 a$ ；cf． also No． 246 b．

236．（1950）．
$h:$ in $\gg \Delta(V 1,49,5) h \not h$, ＂seek＂．Origin ；sub－ stitute for - No．159．

237．$\simeq(1960)$ ．
$\hbar$. ：in $\bar{\sim}$
 by Drioton，Annales du Service，40． 350.
238．${ }^{(1)}(1960+3014)$ ．
h．：only noted in $\ddagger(\mathrm{I}, 74,8=\mathrm{Xl}, \mathrm{Pl} .243)$ gmh，＂see＂．Origin ：as No． 237.

239．（1966）．
（a）$\underline{d}:$ in（IV，19，5）$d s f$ ，＂himself＂．Origin ： －$d w$ ，＂mountain＂．
（b）$d$ ：in 1 ＂ Origin ：phonetic change，
（c）$t$ ：in $0,{ }^{\prime}{ }^{\prime}{ }_{1}(\mathrm{IV}, 19,5) s t(w t)$ ，＂rays＂．Origin： phonetic change．
（d）$h:$ in （IV，12，2）$h h(n h h)$ ，＂eternity＂．See Note LXII．Origin：confusion with No． 237.
（e）$m$ ：rare，in（Mam．，147，1）dm（3ty）， ＂wings＂．Origin：${ }_{\text {mim }}^{\text {＂m }}$ © $m n t$ ，＂cliff＂，suggested by Drioton，Annales du Service，40， 341.
240. $(1966+3013)$ ．
$h:$ in＂ה（Mam．，23，12）hdd ${ }^{\text {M }}$（Mt，＂rays＂． Origin：confusion with No．238．See Note LXII．

[^17]241，$(1966+249 b)$ ．
$h$ ：in ㅜㅜㅁㄴ $h d d t$ ，＂the scorpion＂（cf．VI， 278，4），ap epithet of Hathor－Isis（V，227，6） and the goddess Wtst－Hr（VI，278，3）．Origin： confusion with No． 238.

242．$\triangle$（3633）．
（a）$k$ ：the normal value，common．Origin：$\Delta$ 巩验 $\Delta\left(^{(1)} k 33\right.$ ，＂hill＂。
（b）$k:$ in（VIII，131，6）$h k r w$ ，＂ornaments＂． Origin ：phonetic change．
（c）$g:$ in $\ell \stackrel{\Delta}{\Delta}$（VI，26，4）igrt，＂necropolis＂： Origin：phonetic change．
243．$\sqsubset$（2006）．（See Note LXIII）．
（a）$s:$ in $(\mathrm{V}, 110,14) \sin n$ ，＂lotus＂．Origin： confusion with $\square$ ．
（b）$\underset{h}{ }$ ：in $\varlimsup_{M \sim A}(V, 371,6) \underset{l}{\text { knd }}$ ，＂tread＂．Origin： phonetic change．
244．（497b），var．（496 b），alt．（2265）．
$i:$ in $\int^{4}$（IV，13，4） itn ，＂sun＇s disk＂．
 LXIV．
245． $\min$（2002）．
（a）$n$ ：the normal value，very common．Origin ： o Immin $n t$ ，＂water＂．
（b）$m$ ：usually as preposition $m(\mathrm{I}, 36,14=\mathrm{XI}, \mathrm{Pl}$ ． 219）．Origin： $\min _{\mathrm{mm}}^{\mathrm{m}} m w$ ，＂water＂，see Note LXV．
（1）In the early writings $\Delta$ as determinative is distinctly bigger than the initial $\Delta_{0}$ cf．Urk．，I 287， 7 ；292．1．
（c）as evidence for a possible interchange of confus－ ion between mm and $\bigcirc$（indicating the value $l$ ？）
 $\xrightarrow[\Delta 11,]{ }(V I, 217,6)$ a word of uncertain meaning describing some sort of weapons．Cf． also $1 \mathbf{3}$＂——m（VI，6，6）msr，＂pavilion， kiosk＂，and Nos． $114 b$ and $304 c$ ．
246．$=$（2013）．
（a）$m$ ：in $\boldsymbol{A}(\mathbf{V}, 216,4)$ itm，＂Atum＂． Origin：${ }_{\square} m r$ ，＂canal＂．
 the＂river＂of the Heliopolitan nome．Origin： from the hieratic of $\underbrace{}_{1}$ iw，＂island＂；cf．also IV，38，13， 14 and Nos．233a， $235 b$.
247．（2005）．
（a）$s:$ in $\underset{\sim}{\sim}$（III，130，15）$n \frac{s}{s} p$ ，＂breathe＂．Origin： s，＂pool，lake＂．See Note LXVI．
（b）$\underline{h}$ ：in $\circlearrowright$ ？（VIII，124，1）rhsw，an epithet of Thoth．Origin ：phonetic change．
248．（2007）．
（a）$s$ ：the normal value，very common．Origin： 1 i，＂pool，lake＂．
 Origin ：phonetic change．
（c）$\underline{k}$ ：in（III，184，5）$\underline{k}(n) m t y$ ，＂nostrils＇ Origin ：phonetic cbange．
（d） ：only noted in writings of ips e．g．㱕 有 （ $\mathrm{V}, 184,6$ ）spst，epithet of Hathor．Origin assimilation of $s$ and $:$ ．See Note LXVII．
（e）$n:$ in $1 \circ(\mathrm{dl}, 13,12) n h h$, ＂eternity＂．Origin ：人 Note LXVIII．
（f）$m$ ：only noted in 400 （11I，167，1）imr ＂hoe＂．Origin ：phonetic change．But see Additional Note 6 on p． 499
249．（2007 mod．），var．of No． 248.
（a）$:$ ：in $\Longleftarrow \circ$（III，133，9）$w \underset{\sim}{2} m$ ，＂corn＂． Origin：as No． 248 a．
（b）$\underline{h}$ ：in（III，67，2）$\underline{l} f t y w$＂enemies＂． Origin ：phonetic change．
250．（2011），var．of No． 247.
$t$ in $\quad(\mathrm{V}, 113,8)$ sšn，＂corn＂．Origin：
as No． 247 a．
251．（1472 b），var．of No． 247.
：in（V，304，12）\％＂，＂cedar＂．Origin ： as No． $247 a$ ．
252．（552 b），var．of No． 235.
$n$ ：usually as genitive（V，304，6）．Origin：as No． $235 a$ ．
253．［丁（2051）．
（a）$p$ ：only noted in spellings of $\square_{\text {OIII }}(\mathrm{V}, 229$ ， 17）$p s(n)\left({ }^{1}\right)$ ，a sort of bread，and in $\quad \square^{8} \square$ ＇（III，26，17）tph $(t)$＂cavern＂．Origin ：$\square_{1} p r_{\text {。 }}$ ＂house＂．

[^18]（b）$h$ ：only noted in the prep．$\square(\mathrm{V}, 39,6)(m)-h$ （3）$w$ ，＂in the presence of，near＂，and $\rfloor$＂ （III，95，3）bhd＂scent，fumigate＂．Origin：error for $⿴ 囗 ⿰ 丿 ㇄$ Note 7 on p． 499.
254．®（2048）
（a）$h$ ：the normal value，common．Origin ：ra $h$ ，＂cou＇t，hall＂．
（b）$p$ ：in זf mm（IV，391，2）pn，＂this＂．Origin ： a－fusion with $\square \square$ ，see Note LXIX，and Addi－ tional Note 7 on p． 499.

255．（2788）．
＇$:$ in $\Longleftarrow \nsim(\mathrm{V}, 300,15) p^{\prime} p^{c}$ ，＂bear＂．Origin： $\rightarrow$＇？，＂column＂，cf．Gardiner，Grammar， p．483，Sign List O． 29.
256．$\quad$ mim（2227）．
：$:$ in 祖 VI，75，8）s $s m$ ，＂drink＂．Origin ： minir＂door＂．
257．－（2366）．
$s$ ：the normal value，very common．Origin：，$s$ ， ＂bolt＂．
258．（1）（3615）．
$\underline{h}$ ：in ${ }^{(1)}$（III，133，4）ra，＂know＂．Origin ：con－ fusion with 0
259．（318 a）．
（a） s ：in（ T （III，204，3） $\mathrm{s} t(3 t)$ ，＂vulture goddess＂． Origin ：confusion with ，No， 248 a．
 confusion with see No． 248 b and Note LXX．
260．（392 b），var．of No． 259.
（a）$\dot{s}:$ in $\mid=1$（IV，356，9） $\mathfrak{i z d}$ ，＂persea＂．Origin： as No． $259 a$.
 Origin ：as No． 259 b．
261．（766 b），var．व्या（766b，mod．），（766 b， mod），var．of No． 259.
$k$ ：in Origin ：as No．259b．
262．（2041）．
（a）$n$ ：only in spellings of $n n t$ ，＂heaven＂，e．g．涂（IV，11，11）．Origin？niwt，＂city＂。
（b）$\underline{h}: \mathrm{in} \rightarrow$ 团 $(V, 71,10)$ srh，＂splace façade＂． Origin ：confusion with $\bullet$ ，cf．No． 317 d．
263． $\operatorname{Hax}$（2829），var． $\operatorname{ax}$（2819 mod．），（2820），Nx （734b）．
$m$ ：as prep．$m .(\mathrm{V}, 4,3)$ ．Origin： $\mid=\mathbf{\Delta}$, imw，＂boat＂，suggested by Drioton，Annales du Service，40． 346.
264． 2 （ $433 b$ ，mod．）．
$w$ ：only in $(\mathrm{V}, 301,6)$ wrt，＂great＂（fem．）． Origin ： 11 wis，＂barque＂．See Note LXXI．
265．（2862）．
$h$ ：only in spellings of $h_{c} w_{\text {，＂flesh＂，e．g．}}^{\text {eee }} 1,46$ ， $4=$ XI，PI．227）．Origin：see Notes IV and LXXII；ef．No： 277.

266．（3629），infrequent var．（3630）．
（a）$p$ ：the normal value，very common．Origin： $p$ ，＂throne，seat＂．
（b）$b$ ：in $\$ 1 \mathbf{l}$（VII，100，15）blad，＂throne＂． Origin ：phonetic ${ }^{\circ}$ change．
（c）＇：only in＊＇＇（IV，234，16）＇nw，＂claws＂． Origin ：error for $\square$.
267．\＆（3290）．
（a）$b:$ is＂${ }^{\text {in }}(\mathrm{IV}, 129,13) k(3) b$ ，＂hippopotamus＂．
 mar，Sign List Aa．4，on p． 524.
（b）$p$ ：only noted in $\left.\operatorname{man}_{8} \cap\right)(\mathrm{V}, 184,15) n p \bar{h}$ ，аи epithet of Khnum．Origin ：phonetic change．
268．咅（3289）．
$b:$ in qua $_{a}^{0}$ 韭（VI，18，9）inb，＂wall＂．Origin ：con－ fusion with No． 267.
269． 9 （2746）．
i ：suff．1st．pers．sing．masc．only certain examples III，133，1；190，12，but see Note LXXIII． Origin ：see p． 289.

270．
$n:$ in c （IV，320，8）$\underline{l n} n$ ，＂alight＂．Origin： － 1 In nt，＂Neith＂．
271．$f(2911)$ ．
（a）$n:$ in $\frac{\square}{\sim}$（VII，319，14）$n s{ }^{\circ} d$ ，＂rend＂．Origin： －$\quad \sqrt[4]{n t}$ ，＂red crown＂．
（b）$m$ ：as prep．$m$（III，66，10）．Origin ：phonetic change．

272．（2900），var．2（2902）．
（a）$k:$ in（VII 9，3）rk，＂time，period＂；fre： quent as suff．2nd．pers．sing．masc．Origin： unknown，see Note LXXIV．
（b）$g$ ：in $\begin{aligned} \text { Heg } & \text {（V，57，10）hngg，＂exult＂．}\end{aligned}$ Origin ：phonetic change．
 ＂true＂．Origin ：phonetic change．
273．$\lceil$（3574），var．ๆ（3575）．
$s$ ：the regular value，oommon，Origin：unknown．
274 M（458 b），var，＂
$s$ ：not frequent，e．g．in（IV，15，1）$s n$ ，suff． 3rd．pers．plural．and perhaps 2 THI （VI， $22,3) b n s$（？）a word of uncertain meaning． Origin ：$\Rightarrow \boldsymbol{\lambda}$ Budge，Book of the Dead（London 1898），176， 6，suggested by Drioton，Revue d＇Égyptologie，1， 47，No．157；see further Nate．LXXV．
275．$-(107$ b）．
$s:$ in $\bar{Z}$（IV，17，4）sns，＂praise＂．Origin： 276．in（3101）．

MA © sist，＂piece of cloth＂．
$\underline{h}$ ：only in $\downarrow=([V, 216,10) \underline{l} b t(i)$ ，＂enemy，foe＂． Origin：$\bullet \perp\{\underline{h} w$ ，＂fan＂．
277.
（2859）．
$h$ ：in fara（ $1,73,3=\mathrm{XI}, \mathrm{Pl}$ ．241）$h^{h} w$ ，＂flesh＂． Origin：confusion with 具，see Note LXXVI．
278. (2491), var. (2493).
$m:$ in $\xlongequal{3}$ (IV, 15, 8) mds, "slay". Origin: ? ms, sickle shaped end of the 1 \& barque, cf. Gardiner, Grammar, p. 501. Sign List, U.1.
279. (2484).
$m$ : as prep. $m$ (IV, 17, 6). Origin : from the value
 "love"...
280. $\int_{p: \text { only in }}^{(1631 ~ b) .}$

(VI, 222, 1.7) $k(3) p_{0}$ "enemy", epithet of Seth; cf. Note LVIII. Origin: 14 ipt, "corn measure".
281. $\frac{1}{}$ (2605).
(a) $d$ : in $\downarrow$.

(b) $t:$ in $\oint_{\Delta}($ IV, 11, 22) $t t f$, "flood". Origin phonetic change.
282. (3296).
$d$ : only in spellings of $\bullet$ N (IV, 3, 1), cf. var. ; D (VIII, 115, 3) awd, "enrich". Origin : phonetic change, from. $t$ ', "kiln". See Note LXXVII.
283. \ (284 b), var, 【 (748b).
(a) $t:$ in $1 \|$ 国 (IV, 199, 13) $i b t(t)$, "trap". Origin : phonetic change from $t_{3}$ ""kiln".
(b) $d$ : only in spellings of $\frac{l d}{} w d$, e.g. © $1 \int_{1}(\mathrm{~V}, 390$, 10) "enrich". Origin: phonetic change, see Note LXXVII.
284. (1151 b), var. of No. 283.
(a) $t$ : in $\boldsymbol{T l}_{111}^{-}(\mathrm{V}, 110,11) n m t$, "produce", Origin : ${ }^{t}$, "kiln".
 Origin : phonetic change, see Note LXXVII.
285. ๆ (2793).
(a) $m$ : the normal value, e.g. $\hat{\|}$ (VII, 122, 13) ' $m$, "swallow". Origin: unknown.
(b) $n$ : as prep. of genitive (VII, 196, 1). Origin : phonetic change.
286. $\sim$ ( $244 a$ )
$m$ : in *
 $127 c, 174$.
287. $\uparrow(2793+710)$.
$m:$ in $\rightarrow 4$ VI, 237, 13) ksm, "attack". Origin : $\uparrow$ plus determinative.
288. $\gamma$ (2597).
(a) $t$ : in $]{\underset{A}{m}}^{m}(\mathrm{VI}, 85,1) t k n$, "approach". Origin : from $\sqrt{t i}$
(b) $t$ : in 0 표 (VIII, 69, 11) $t t$, "altar". Origin: phonetic change.
(c) $d:$ in $]$ (III, 191, 5) $d g(3)$, "see". Origin : phonetic change.
 phonetic change.

289．$](2601)$ ，var． $\int_{( }(508$ b）．
 gin ：error for 7 ．
（b）$m$ ：in ${ }^{\circ} 0_{d_{0}^{\circ}}^{\circ}$（VIII，34，2）htm，＂Egypt＂．Ori－ gin：$m n$ ，＂remain，endure＂．See Note LXXVIII．
290． of（3482）．$^{\text {（3）}}$
$w$ ：in 1 afl 4 （VII，52，2）$k z w t$ ，＂lift， raise＂．Origin：cf．की 甪 wsw，＂lassoes＂．
291．（ 1046 b），var．o（3473）．
$g:$ in $\int \xrightarrow{d}(\mathrm{~V}, 270,3) b(3) g s$ ，＂stab＂．Origin ： from $\gamma$ in pry wg．＂misery＂，cf．Gar－ diner，Grammar，p．511，Sign List V．33； B．1．F．A．O．，30，180， 181.
292．b（3475），var．of No． 291.
$g$ ：only noted in $f_{0}^{b_{0}}$（VI，229，1）$n b(t) f g$ ， epithet of Nekhbet．Origin ：as No． 291.
293．－セ（3464）．
$s$ ：only in $\frac{\Delta^{2} n}{-\varrho}(\mathrm{V}, 30,1)$ di．f $s(w)$ ，＂he shows him． self＂．Origin：cf．巩 $\Gamma_{\wedge}^{-e^{-}} 3 s$ ，＂hasten＂．
294．$\leftrightharpoons$（3437），var $\curvearrowleft(3438) \leftrightharpoons(429 b)$ ．
（a）$\underline{t}$ ：the normal value，common．Origin：cf． ＝0 ${ }^{\circ} \underline{t t t}$ ，＂fetter＂．
（b）$t$ ：in （IV．194，14）$m r(w) t$ ，＂love＂．Origin ： phonetic change．
（c）$d:$ in $\rightleftharpoons$（IV．212，7）$d m(i)$ ，＂traverse＂．Ori－ gin ：phonetic change．
 of Amun．Origin ：phonetic change．
（e）$i$ ：suff．1st．pers．sing．fem．（VI，152，8）． Origin：see p． 502.
295．Afft（3508）．
$s:$ in $\ /(\mathrm{I}, 69,16=\mathrm{XI}$, PI．238）shd． ＂illumine＂．Origin ：$s 3$ ，＂hobble＂．
296．X（3129）．
$s:$ in $X \circ Q$（VII，2，3）shd，＂illumine＂．Origin X $1, s 3$ ，＂protection＂．
297．\＆（3488）．
$h \quad$ ：the normal value，common．Origin ：unknown． 298．（3257）．
（a）$k$ ：in （IV，240，11）sk，＂perish＂．Origin ： error for $\rightarrow$ ．
（b）$g$ ：only noted in $\square_{\text {mind }}^{\text {mind }}$（III，285，14） gnhw，＂wings＂．Origin：error for $\sigma$ ．
299．（3263）．
（a）$k$ ：the normal value，common．Origin：un－． known．
（b）$k:$ in $\cap \underset{R}{Z}$（VI，232，4）skr，＂smite＂．Origin： phonetic change．
（c）$g:$ in $(V, 112,2) g r h$, ＂night＂．Origin ： phonetic change．
300.
（3255），var．（3255 mod．）．
（a）$g$ ：in（VII，5，2）$g b(t)$ ，＂heaven＂． Origin： 4 县 $\mathrm{g}_{3} w t$ ，＂bundles＂．
(b) $k:$ in $(\mathrm{NII}, 24,12) b(i) k$ "falcon". 'Origin: phonetic change.
301. (3272).
(a) ${ }^{\text {c }}$ in (IV, 13, 3) is "cedar". Origin : - '", "bowl".
(b) $b$ : in ${ }_{\square}{ }^{-} \uparrow(\mathrm{LII}, 69,18) b h(t)$, "fan". Origin: error for $\AA$.
302. IT (2355), var. (2354), is (5726) (rate). Note LXXIX.
(a) $g$ : the normal value, e.g. © (VII, 2,5) wbg, "illumine". Origin : unknown.
 328, collated) $n n$, "child". Origin : confusion with $\sigma$, cf. No. 303 e. See Note LXXX.
303. (2362), var. $\triangle(955$ b). Note LXXIX.
(a) $g$ : common, e.g. I $\mathbf{I}(\mathrm{IV}, 120,14){ }^{\mathrm{c}} \mathrm{g} t \mathrm{t}$, "talon". Origin : confusion or fusion with $\triangle$.
(b) $k$ : in $\rfloor \mathbf{I}(\mathrm{I}, 37,13=\mathrm{XI}, \mathrm{Pl} .221) b k r$, "throne". Origin: phonetic change.
(c) $k:$ in (VI, 65, 5) lind, "rage, be furious". Origin : phonetic change.
(d) $\underline{h}$ : in $=14 \ldots$ (IV, 68, 10) $\underline{h} k r w$, "ornaments". Origin : $\stackrel{\Delta}{\triangle}$, Ptol, $\underset{\square}{\infty}$ r."under".
(e) $n$ : only in (V, 266, 19) $n n$, "child". Origin : confusion with $\sigma$, cf. No. $302 b$.
304. © (3305).
(a) $n$ : common, e.g. $\frac{\text { en }}{\lambda}$ (VI, 49, 5) hns, "traverse". Origin: from the phonetic value in in ${ }^{\sigma} i n k$, "I" or $n w$, in $i_{1}^{0} n w$, "of".
 Origin : phonetic change.
 $226,9) m h n w(o l d ~ m h r)$, "milk jugs". Cf. also Nos. $114 b, 245 c$. Origin : phonetic change.
305. (3331).
$p$ : only in spellings of irp, "wine", 边 (IV, 19, 2). Origin : error for ef. Nos, $164 b, 306$.
306. (3332).
$p$ : only in 2 (VII, 117, 9) irp, "wine" Origin: error for - cf. Nos, 164, $b, 305$.
307. - (3608).
(a) $t$ : the normal value, very common. Origin : it $t$, "bread".
(b) $\underline{t}$ : in 0 Hence, frequently suffix 2nd. pers sing. fem. Origin : phonetic change.
(c) $d:$ in $1 \uparrow$ (VI, 28, 11) $i d b$, "shore, bank". Origin: phonetic change.
(d) $d:$ in $\varphi-\rfloor \subset(\mathrm{CI}, 80,1) w d b$, "turn". Orig. in: phonetic change.
(e) $i$ : suff. 4 st. pers. sing. fem. (VI, 48,10 ). origin: see p. 503-504.
308. $\leftrightharpoons(245$ b), var. (282b).
$t$ : only roted in $=1 / 1(V I, 98,15)$ and (VI, 255, 12) ntt, "existing things". Origin: - $t$, "bread".
309. (3234).
$t$ : frequently replaces $t$ in $\quad(\mathrm{V}, 302,16)(i) t_{\mathrm{s}}$ "father". Origin: * $t$, "bread".
310.
(3238).
$t$ : in لíg (VII, 6, 7) btn, "enemy", frequent in * (VII, 267, 15) (i)t "father". Origin : confusion with 0 .

311, (1491 b)
$t$ : only in '(V,399, 1)(i)t, "father". Origin: as No. 310.
312. $\Delta(3641)$.
(a) $d$ : in $H \cap \cap \mid \mathcal{H}(\mathrm{V}, 90,7) m d s$, a name of Seth. Origin: $\Delta d i$, "give".
(b) $t$ : only noted in ${ }_{A}^{0}(\mathrm{IV}, 11,4) n t$, "of". Origin : phonetic change.
313. (3195).
 Origin : $m n$, "remain, endure", see Note LXXVIII.
 snd, "fear". Origin : see Note LXXV.
314. I (3525).
(a) $i$ : as suff. Ist. pers. sing. masc. (IV, 20, 14) and fem. (VI, 50, 2), both uses are common. Origin : the stroke is an ideogram expressing one, unity.
(b) $p:$ in $\square_{1}$ ran (VIII, 121, 16) "pp,"Apophis". Origin : confusion with $\quad$.
(c) ' 1 , very occasionally has the value $w$, suff. 3 rd. pers.plural, e.g (VI, 145, 5) ir.w, "they make'. Origin : conventional expression of plurality, $w$ being the Late Egyptiaı suff. 3rd. pers. plural.
315. II (3536).
ii, a cursive form of 44, has the following uses which are in the main phonetic in origin :
(a) $i, y:$ in $\#(\mathrm{~V}, 221,6) s t i$, "odour".
(b) 3: in "I "ل (V, 214, 4) hab, "hippopotamus".
(c) $t$ : in $\bigotimes_{0}(\mathrm{~V}, 132,6) r h \operatorname{t} t$, "list".
(d) apparently meaningless: frequently in conjunction with $\Delta$, e.g. $\underbrace{\prime}_{\Delta}(\mathrm{V}, 299,2) t k n$, "approach", but also in other words (usually
 "excellent". But note $\left.\ell^{\prime} "\right](\mathrm{V}, 223,15) ~ h \bar{b}$, (опп) '"festival".
316. © (3460), occasional var. 2 (3467).
(a) $w$ : the normal value, e.g. сठ (VI, 19, 5) $w n_{9}$ "be". Origin : cursive, hieratic form of $S$ (No.1187).
(b) $\check{s}:$ in $e$ (VI, 70, 1) were "chew". Origin : e st, "hundred", e is the normal Ptolemaic equivalent of $e$.
(c) $\underline{n}$ : in $\nabla^{\square}{ }^{\prime \prime}(\text { III, } 183,6)^{c h}$, "lift, raise". Origin : phonetic change.
(d) $f$ : in ${ }^{\bullet}$. ${ }^{\prime}$ (III, 218, 5) hftyw, "enemies". Origin : confusion with e, cf. Note XXXVI.

317．（2457）．
（a）$n$ ：the normal value，common．Origin：o 解 ＂placenta＂（？）．
（b）$\underline{h}$ ：in（Vl，196，2）$\underline{h} d b$ ，＂slay＂．Origin： phonetic change．
（c）：：in（VI，285，1）ipt，＂anger＂．Origin： phonetic change．
（d）$n$ ：infrequent，in $\stackrel{0}{\rightleftharpoons}$（VIII，161，1）$n n t$ ， ＂heaven＂．Origin ：confusion with \＆，cf． No． 262 b．

318． $\int(3512)$.
 （IV，109，10）win，a form of pine cone．Origin ： cf．${ }^{\circ}$ ，a word of uncertain meaning （Pap．Leiden 345，Vs．G．4，1．3．4）．
319.

1（2155）
$s:$ in $1 \| \$(\mathrm{VI}, 15,8) \operatorname{sgmh}$ ，spear of Horus． Origin：$\underset{1}{2}$ s，＂back＂．
320．＇T（2553）．
$m$ ：only in $\uparrow$（III，68，8）ms．r．＂evening＂． Origin ：see Note LXXXI．

C．－NOTES ON THE SIGN LiLST．
1．There are two alternative ways by which ，通 and＂ 竞 may have acquired the value $f$ ．Either an gives the value，the human figures simply acting as sup－ ports，or each sign is the ideogram $f_{3 i}$ from which the mono－ consonantal value is derived on the consonantal principle．

I favour the second alternative，since the signs are used at Edfu both as monoconsonantal $f$ and as the ideogram $f_{i j}$ ．See also Note XXI．
 the occurrence of this word in the Old Kingdom cf． Grdseloff in Annales du Service，42， 114.

III．There are solid grounds for believing that in Ptolemaic the old word $\delta 00$＂child＂had become $n n$ ． This is supported by the writing of the name of Herakle－ opolis，writings such as $0_{0} 8$ ，and by the use of hiself with the value $n n$ ．Nevertheless，this does not prove that the original word was $n n, n w n w$ or the like，and the early writing of the name of the god Nun as $\hat{\AA}$（Pyr． $446 a, W)$ and of the demonstrative pronoun $n w$ as 0.4 （Pyr． $128 a, \mathrm{~W}$ ；var．T， M and N ）favour the view that originally the word was to be transliterated $n w w$ or niw（ ${ }^{1}$ ）．The Ptolemaic writing $\overline{g_{0}}$ 角 is，of course， purely historical．It is impossible to－day to decide whether捔 acquired the value $n$ from the original $n w w$ or the contemporary $n n$ ．The distinction is a subtle one and not of prime importance，for，whatever view one adopts，the monoconsonantal value was undoubtedly obtained by the application of the consonantal principle．

IV．The real point of interest here is the falling away of－Although was one of the weaker consonants and was not written in Coptic for instance，it does not appear to have been as weak as $3, i, w r$ or $t$ ．At Edfu it appears that only weakens or falls away in certain

[^19]definite circumstances，when it either follows or precedes 8，or，much less frequently，or（1）．Except in these conditions，I can find no examples of the weakening or disappearance of $-\omega$ ，the apparent exceptions in f－f $\uparrow$（VII，292，10）for＂$b b$ ，＂harpoon＂and a few other words having a different explanation（cf．Note．XIX）．

When preceded by 8 there appears to be a tendency for to become $\boldsymbol{\sigma}^{( }{ }^{2}$ ），which in its turn weakens and is apt to be modified to $\mathbb{S}^{\sim}$ or to disappear ${ }^{( }{ }^{3}$ ）．Dr． Cerny has suggested to me that perhaps this is to be explained by the juxtaposition of the two gutturals 8 and $\ldots$ ，but whatever the explanation may be，the facts are certain．Whether the same explanation applies when ــ precedes $\frac{8}{8}$ is quite uncertain，possibly it does，but no explanation of the phenomenon has ever been made and I cannot find any examples of $\Omega$ becoming $\varnothing$ before \＆

The following examples will serve to illustrate these remarks ：
（a）after $\frac{8}{i}: \ldots$ becomes weak，e．g．，$\square$（Ill，100，

[^20] equipment＂；\％（III，320，1）$h^{i} 3 w, ~ " y o u t h s " ;$ disappears as in $(\mathrm{IV}, 19,6): w(3) h$, ＂garland＂，$\simeq$ $8 \downarrow$（III，361，8，cf．IV，287，9）$m h\left({ }^{( }\right)$d $d_{3}$ ，＂wrongfully＂．
（b）before $\%: ـ$ either disappears as in $4 \frac{8}{8}(\mathrm{~V}$, 55，10；cf．IV，32，1；Mam．，197，3）＇（＇）h．＂moon＂；and I $\ell_{1}^{\delta}(\mathrm{V}, 179,2) b\left({ }^{*}\right) h$ ，＂inundate，flood＂，or is equival－ ent to $\mathbb{N}$ ，as in $\int$－（IV，298，13）b3h，＂phallus＂． Cf．also Nos． 265 and 277.
 $w$, ＂glory＂．
（d）after $m$ ：weakens，as in $\mid \mathbf{A}=\mathbf{A}$ （III，154，5） $\mathbf{3}^{h}$＂＂inscribe＂，or disappears as in （VIII，112，3） $\boldsymbol{s} \underline{h}\left({ }^{( }\right)$，＂inscribe＂．

Such are the conditions under which，weakens or disappears at Edfu．There is evidence，however，from other temples that - could behave as the other weak consonants and that occasionally it could fall away when in contact with other consonants than \＆ 8 ，cf．Sethe，Die Neuentdeckte Sinai－Schrift und die Entstehung der semi－ tischen Schrift in Nachr．von der Kgl．Ges．der Wiss．zu Göttingen．Phil．－Hist．Klasse，1917，p．473，and（am队㔄 Hnm，＂Khnum＂（Brugsch，Thesaurus， 651 F）． Examples of this falling away of $\ldots$ are rare and would appear to be a late development．Cf．No． 219 （e）．

V．It is possible，of course，to see in 媛 a phonogram $i k$ from 4及 $)^{\circ} i_{3} k$ ，＂be aged＂，but it is somewhat improbable since in the example quoted in No． $29 b$ this sign can only represent 3 ．
VI. At present this is the only example known ta me. The usual form is No. 88.
VII. This sign usually reads either hm, "majesty" or l.m. $i$, "my majesty". In the example quoted, however, the king himself is speaking and it suits the context better to take the sign as the suffix pronoun.
VIII. I doubt very much whether the signs composing this and similar spellings of the name of Dendera are in any sense monoconsonantal and 1 am quite unable to suggest any way in which they could have become monoconsonantal. The explanation first put forward by Dümichen ( $Z \ddot{A} S ., 1869,105$ ) that this name is to be read $W_{\text {sir- }}$ ! $!r$-St is likely to be correct. Cf. Dūmichen, Baun geschichte, XLI; XXXVII, 10.

$$
\text { IX. Thus }{ }^{7} \text { is } n-\frac{i}{3} \text { in tyly (III, 190, 11) ssp.n.i, "I }
$$ received".

X. Derived from 49 "Thoth" through a misunderstanding of the hieratic form of (cf. Schaefer in $Z A S ., 40,124)$. Although it may be presumed that when the misunderstanding first arose 49 was constructed as $\underline{L} h w t i$, it is clear that its origin was speedily forgotten and that 49 was taken as $i$, not so much as a real name of Thoth as an epithet similar to rllsw, $i p, s s^{r}$, siz etc. Hence it was but a step for some signs that depicted Thoth to acquire the value $i$ on the consonantal principle, or for creatures or objects identified with Thoth to acquire the same values by rebus. See further Note XXVII. Drioton, however, (Annales du Service, 40, $351=$ ici p. 106 (80) suggests that this value was acquired by acrophony from $4-8)^{\prime}$ ) 'ch, "moon". See Additional Note 1, p. 496.
XI. Also used in the Old Perfective (VI, 87, 3) $k w i$, and in the independent pronoun is (VI, 79, 12) a Y (V1 8l, 4) nwi (inwi).
XII. Hence reads n. $i$ in (IV, 139, 8) sip-n.i, "l have received".
XIII. Hence 虽 (Mam., 82; 4) reads hmt.t, "thy (fem.) majesty".
XIV. Probably also in (VI, 131, 3) "trouble,
 rather than $k r-n-h r$ which is the rather unimaginative preference of the Wörterbuch (cf. Wilson, "The descendants of $h$ wny-r-hrr' in ZÄS., 68, 56-7) ${ }^{(1)}$.

XV . That $\uparrow$ reads 'Iwnt, "Dendera" is certain from comparison of the very common title of Hathor

 the great, Mistress of Dendera, Eye of $\mathrm{Re}^{-e}$, residing in Behdet, Mistress of Heaven, Mistress of all the gods" (cf. $Z \ddot{A} S$., 43, 120). This writing cannot have been monoconsonantal and Grdseloff has suggested to me that $\varphi \cdot \varphi$ probably arose through a rebus on the conception of Hathor as a sistrum with two faces. This idea finds expression
 with ber two faces' $\left.{ }^{( }{ }^{( }\right)$. Hathor the lady with the two faces was also the lady of Den'dera ${ }_{0}^{0}$ 'Iwnyt( ${ }^{(3)}$.

[^21]Thus there was a rough equation and it seems not at all impossible that $\mathbb{1}_{\Delta \Theta}^{m}$ ，the city of Hathor，could have come to be regarded as $\varphi \cdot \varphi$ ，the city of the lady with the two faces and thus the latter combination may have been regarded as＇lwnt．If this suggestion is correct，$\uparrow \cdot \varphi$ as a writing of $\hat{H}^{2}$＇Iwnw，＂Heliopolis＂would be a secondary developraent．

XVI．Hence 4 is $m k$ in （III，86，13）$m k$ ， ＂festiva！＂，and 4．（VI，325，4）mki，＂protect＂．

XVII．Similar spellings of $\mathrm{tms} \mathrm{s}^{-}$that occur fairly frequently are（III，132，6）and（III，43，15）， but these are porbably to be explained as originating by metathesis from A ${ }^{\text {M }}$

XVIII．Evidence for the interchange of $b$ and $m$ is scanty as far as the alphabetic signs are concerned（cf． No． $166 c$ ，together with Notes XXXV and LV）．Multi－ literal signs，however，give clear indications of the change， thus（，originally nhbt，＂lotus bud＂，is a not uncommon writing of nhm，＂rescue，save＂（e．g．，IV，29，14）．

XIX．It is very unlikely that any phonetic reason lies behind the use of $\ddagger$ here instead of simple J． At all periods hieroglyphic writing has a fondness for symmetrical and＂square＂groupings and this is parti－ cularly evident in Ptolemaic．One of the devices employed by the Ptolemaic scribe was to use additional，unetymol－ ogical signs in order to give a symmetrical appearance to words．The word under discussion is a case in point． Though the process is not exactly a common one，it is not difficult to quote other instances ：e．g．$\square \int \square \int \mathrm{m}$（VII， 313,1 ）for＇bb，＂winged beetle＂， $89(\mathrm{VI}, 133,1)$ for
 essive Ba ＂or $\min _{0} 0 \prod_{0}^{\circ}(I V, 239,14)$ for dngns，an epithet or name of the uraeus．Ptolemaic also employs the converse process whereby，if two identical signs are separated by a third，different sign，only one of the ident－ ical signs is written and does the work of both；thus出×（IV，309，13）for sbs sb，＂divide＂，点（III，
 for hmhmty，an epithet of Apophis，or often in $\triangle \triangle \vec{O} \vec{\circ}$ （III，15，9），$\stackrel{\rightharpoonup}{0}_{0}^{0} \int_{0}^{\circ} G(V I I I, 121,3)$ and other spellings of， dngngs．Very occasionally both processes are combined， as in \＃－（IV，374，1）for＇bb，＂harpoon＂．These and similar writings are clearly graphic and not phonetic in origin．

XX．But $\underset{\boldsymbol{R}}{\boldsymbol{\sim}}$（VIII，97，9）reads phr，and is derived from a misundertanding of the hieratic form of $\rightleftharpoons$ ．

XXI．Ultimately，of course， $\mathbb{\AA}$ derives the value from ${ }_{\text {I }}$ ，＂pool＂but it is probable that its immediate origin was＂罗 s šm，＂go＂，a frequent Ptolemaic writing of which was 尽，recalling Coptic we．

The difficulties that attend any attempt to establish the precise origin of many of the composite signs cannot yet，in my opinion，be overcome in a satisfactory manner since the solution lies in a more complete knowledge than we yet possess of the composition and formation of the composite signs．It is this that accounts for the apparent inconsistencies in the origins I have suggested for the values borne by certain composite signs：

Originally，of course，such signs as，$\AA, \stackrel{\pi}{\Lambda}, ~$罟，不 定 and $\AA$ arose through the combin－ ation of alphabetic signs or phonograms with the legs $\Lambda$ ， which acted as supports or determinatives，but some of them became recognised phonograms．It is difficult， if not impossible，for the modern student to ascertain whether the ancient scribes always analysed and $\&$ according to their component elements or whether eventually they did not come to lose sight of the ultimate origin and regard each sign as an entity in itself．

The position with regard to human or divine figures combined with crowns，headdresses or other signs is rather more complicated．If we argue，as I think that we must， that in $\rfloor$（No．48）the $\$$ is only the support，what are we to see in 岛，凫，】，and their variant forms？

As a purely personal working hypothesis，which obv－ iously may have to be modified with increased knowledge and understanding，I am inclined to be guided by the following consideration．If a composite sign has an established and，preferably，long history as an independ－ ent phonogram and later comes to act as an alphabetic sign，the latter is probably to be derived from the whole sign as a phonogram and a unity and not from one of the component elements，although the ultimate origin of the whole sign must not be forgotten．

Accordingly，I am at present inclined to derive the monoconsonantal used of establisped use as the phonograms $s m$（ye），it and in， and to separate them from $\pi^{\prime}, \bar{\Omega}$ ，and， $\bar{\Omega}$ which appear to be merely alphabetic signs combined with
$\wedge$ or $A . \pi$ and $\neq$ are border line cases，but my bias is towards ranging them with the phonograms．

With regard to the signs in which human and divine figures play a part，it will probably be conceded that acquired its monoconsonantal value from $f /$ ，but since $\$$ and $\$$ are also used as phonograms or word－signs it is probable that their employment as alphabetic signs originated in the phonograms and not in or $\sigma$ ．Since ＂and 角 also act as phonograms，it is possible that they acquired their monoconsonantal values from the phonograms．In analysing $\frac{5}{5}$ and to assign them to that class of composite signs composed of a phonogram plus its phonetic complement（e．g．Y，
$\neq, *)$ ，rather then to consider them as merelyman plus support，which is their outward appearance but which does not take into account their employment as phonograms．

The final and decisive answer to these problems， if it can ever be given，must wait till we know more about the nature and composition of the composite signs．There is，however，no necessity to assume that all signs of similar outward formation are necessarily bound to have orig－ inated in similar ways．This is pure assumption，void of any basis in fact，and contrary to the facts at our disposal．

XXII．The origins suggested for Nos． 144 and $145 a$ have been influenced by a suggestion made to me some time ago by Professor A．M．Blackman，who drew my attention to the texts accompanying the scenes of the off－ ering of Truth $\left(m^{r} t\right)$ ．In these texts a striking feature
is the frequent use of the words and y y a as synonyms of $M_{3}{ }^{\circ} t$. At first sight the difference between these words appears to be considerable, but closer examination will show that in fact it must have been slight. In Coptic both $\Rightarrow 04, \mathrm{~m}^{\mathrm{c} t}$ and $m r i$, "love" are ME, and it is therefore easy to see how the pun © itself must in all probability have been mr or mry (and not $m t$ ), the Middle Kingdom variant 44 ( ${ }^{(1)}$ being significant and, I think, decisir?. The writing ?.... probably originated through a misunderstanding of the true value of , which was emended into a word which must nevertheless, have had a similar pronunciation. Since this question will shortly be the subject of a detailed study by Professor Blackman, I refrain from anticipating his remarks and from giving full supporting quotations.
XXIII. Similar confusion between the and occurs in Y䛼 YYYY (IV, 14, 9) "like heaven upon its supports". Cf. also hor (III, 187, 14) for has $s 3 b-s s^{s}:$
XXIV. Hence forms an element in various composite signs : e.g. is $r s{ }^{k}$ in $r s w t$, "joy" (IV, 17, 4) and $s$ s $r$ in $m s{ }^{*} r$, "evening" (I, 40, $14=\mathrm{XI}, \mathrm{Pl} .222$ ); $(d s+r)$ is $d s r$, "sacred, private", is $r^{c}$, "Re'e" and $r d{ }^{c}$, "give".
XXV. Without a close examination of the original forms, which I have not been able to make it is difficult to say whether this sign represents a cat or a lion. In

[^22]suggesting that it is a cat.I have been influenced less by the actual appearance of the sign as it is given in the fount than by the fact that at Edfu on is used far more frequently than $m$ to spell $\mathrm{m}^{\text {i }}$.
XXVI. Hence and read in and reads $\underset{1}{4} d$ $m d w$ in.
XXVII. Drioton $\left({ }^{1}\right)$ while admitting that the value i may have been acquired from 49 has argued that we cannot tell that the Egyptians looked upon 47 as i and not $\underline{D} h w t i$ and has therefore suggested that $i$ was derived by acrophony from 4——新ich, "moon". It is, of course, quite likely that when 47 was first used the scribes construed it as $\underline{D h w t i}$, but the fact that in Ptolemaic texts $y^{y}$ itself is equivalent to $i$ is clear proof that at least in Ptolemaic times the true origin of 49 had been forgotten and the group was simply interpreted as $i$, an epithet of Thoth. Once this stage had been reached, it was but a small and natural step for symbols of Thoth to acquire the value $i$ by rebus in the same way that in becomes $i b$ by rebus from Thoth's epithets $i b$ and ib $n R^{c}$. It is surely no mere coincidence that $A, \lambda_{1}$,) and $\delta$, all associated with Thoth, should have acquired the common value $i$ (see Nos. 179, 228 and 229), and it would not be at all unnatural to find that they had a common origin. It may be argued that $\boldsymbol{A}$ became $i$ by acrophony from ich, "moon", though personally I do not find this convincing, and $\lambda, \cdots$,) also from $i \not h$, but acrophony is hardly likely to explain 3 , since the value $\hat{i} b$ that
(!) Anisales du Service, 40, 341. [see p. 91-92 in this edition]
this sign sometimes bears is purely secondary, and moreover $i$ might be derived acrophonically from $i k r$.

The simplest and most direct course is to derive all these values from 47. See also Additional Note 1 on p. 496.
XXVIII. Hence ${ }^{\boldsymbol{T}}$ is a very common writing of S3, "protection". Cf. the composite signs 设 bss, "protect, protection" and ss.f(Mam., 55, 10) "his protection".
XXIX. It is very unlikely that $\boldsymbol{A}$ could have acquired the values $\underline{d}, \underline{d}(d)$ by acrophony from . $\sum_{n} \underline{D} h w t^{\prime}$. There are various objections to such a derivation, not the least being the inherent improbability of acrophony having played an important part in the formation of alphabetic values. It is surely remarkatle that, if $\underline{D} h w t i$ is indeed the origin, neither 3 nor is ever the phoneme $\underline{d}$ in any Ptolemaic text known to me, although that would be a natural and obvious value if this suggestion were correct ${ }^{( }{ }^{1}$. Moreover, if a sign is to aoquire a monoconsonantal value from a given word either by the consonantal principle or by acrophony, it is essential that the sign itsëlf should be either an ideogram representing the word
(1) In a cryptogram of the New Kingdom, however, 3 has the valued: in 3 7 Trman (Drioton in Revue d'Egyptologie, I. $16=$ Inscr. B. 18) ; cf. also Annales du Se, ivice, 41, 116. [ $=$ p. 222 above]. In a monumental cryptogram Drioton has suggested that a standing figure, which he thinks may have been that of Thoth; had the value $d$, but it is damaged and it is uncertain whether it is real!! Thoth $($ Annales $d u$ Service, $40,332[=\mathrm{p} .99$ above $]$ ). Even in these cases, however, it has not been proved conclusively that $d$ was derived from, Uhwhi, though this certainly seems, a plausible sugigestion.
in question or the "determinative" of that word. To tne best of my knowledge, at no period does $\boldsymbol{A}$ act as the determinative of $\underline{D} h w t i$, and it is very rarely an ideogram with that value ${ }^{1}$ ). It is unlikely, therefore, if not quite impossible, that $\underline{d}$ could have been derived from $\underline{p}$ hwti.

It is true that the ape was a well-known symbol of Thoth, but this does not necessarily imply that it assumed the name of Thoth, and unless $\boldsymbol{\lambda}$ was a legitimate variant of the name $\underline{D} h w t^{\prime}$ it cannot possibly have acquired the value $\underline{d}$ from that word. It should be noted here that while a god may have several symbols and numerous names or epithets, it does not follow that every symbol can or does bear all the names or epithets of the god with which it is identified and in fact all the evidence points to a certain degree of specialisation. Thus, in the case of Thoth, among his symbols are the ape and the ibis, among his numerous attributes or epithets are $i b, i k r, w p, r h, s i z$ and si, but while $\boldsymbol{A}$ an be $w p$, siz or $s s^{2}$, it is never $\dot{i} b$,
(1) I am aware of oaly three possible instances in which $\boldsymbol{A}$ may be equivalent to D.wwi : $\prod_{1}^{0} \boldsymbol{1}$ (Cairo $689=$ Borchardt, Statuen und Statuetten, IIi, 33), il
 ${ }^{30} \mathrm{G}$, quoted in Boylan, Thoth, 3 , which I have not been able to check). It is very tempting to read $D h w t i$ in these three cases, but the reading is not quite certain and it may prove to either wp or wpwti. In two further instances (Roeder, Der Tempel von Dakke, I, $312=11$, Pl. 115 ; Lanzone, Dizionario di Mitologia Egizia, 111 , Pl. cciv, 1) the figure of an ape is accompanied by an inscription in the name of Thoth, but in neither of these cases is it certain that the name of the ape itself is $\overline{D h w t i}$ and it is only the association of the ape with Thoth that is indicated. The personal name $\boldsymbol{1} \boldsymbol{U}$ (Cairo 22338 Ahmed Bey Kamal, Steles ptolématques, 216) is
 Edfu, and at Dendera also as far as 1 am aware, $\boldsymbol{\lambda}_{\text {a }}$ never has the value $D h w t i$, and though the examples just quoted indicate that occasionally it may have borne this value, they are quite exceptional and it is certain that it is not the normal value.
$i k r$ or $r \boldsymbol{h}$ which are values borne by alone, which in its turn is never $w p, s_{23}$ or $s s_{8}$. It is probable, therefore, that the origin of the value under discussion is to be sought in a name or epithet of $\boldsymbol{\Omega}$ or in an epithet of a god (who may or may not be Thoth) who is associated with the ape.

In considering the ape, the mind turns naturally to Hermopolis, where the ape seems to have been older than the ibis. At Hermopolis, in addition to the celebrated "Eight", there was also a "Five", which appears to have been older than the Eight $\left({ }^{1}\right)$. The high priest of Thoth was $\left.{ }^{\prime}, \bar{\square} \square{ }^{2}\right)$ "chief of the Five in the temple of Thoth". The same connection of the Five with Hermopolis and with an early creation myth is clearly


$$
\rightarrow \bar{m}
$$

to thyself the plant that came into being in the beginning, the noble lotus, ruler of the great pool, amidst whose five sepals thou didst come forth in Wnw'" ${ }^{4}$ ).

[^23]The exact composition of the Five is unknown. A text at Edfu speaks of Thoth as $\boldsymbol{y}^{\prime 2}=7_{11}^{\prime \prime}$ "great chieftain of the five gods" but it is not certain that Thoth was originally one of the Five, still less that he was their chief. Sethe has suggested that the god $\left\langle\right.$ "יㅐ ( ${ }^{2}$ ) was not Thoth but Osiris $\left.{ }^{(3}\right)$, 4. confirmation for which is forthooming in the statement, overlooked by Sethe, that Nut gave birth to Osiris as $\Delta=7 ", 1{ }^{(4)}$ "chief of the five gods". Osiris was
 among the five gods", and even ${ }^{\prime \prime} 11\left({ }^{5}\right)$ or $\times{ }^{5}\left({ }^{5}\right)$ as though he were the very epitome of the Five. It is probably Osiris, therefore, who is twice mentioned at Edfu in the epithet of the king Nf N M (7) "image of the god Five", a suggestion that is supported by the epithets of a Ro-
 "the good god whom 'the chief of the Five" created, the heir of Hnti-Hsti".

So far this discussion has had little direct connection with the ape, but evidence is not lacking that there

## (I) VI, 144, 1-2.

${ }^{\left({ }^{2}\right)}$ ) Mabiettra, Abydos, I,44; Softaparmur, IL Libro dei Funerali, 11, 114.
(5) SETEE, op. cit., 8874,75 .For Sethe's suggestion that was also Osiris cf. (VI, 301, 14).
(9) Nav̈ille, Das ägyptische Todtenbuch, Pl. CCIX, 30-31.
${ }^{(5)}$ Quoted by Sethe, op. cit., § 75.
( ${ }^{\circ}$ ) Urk., IV, 543,9 ; cf. 545, 1, Quoted by Setere, op. cil., § 75.
(7) V, 293, 2, cf. V, 252, 17.
${ }^{(8)}$ From a text of the Roman Period at Deir el-Shelwit, between Medinet Habu and Armant, quoted by Sethe, op. cit., § 74 .
was some special connection between the ape and the number 5. This evidence was first produced by $\operatorname{Kees}{ }^{(1)}$, who published drawings from three monuments which are reproduced in Fig. 55.

The earliest example (Fig. 27a) $\left({ }^{2}\right)$ comes from Abydos and is dated to the reign of Semempses of the First Dynasty. It depicts an ape seated on a throne with a much damaged but certain numeral 11 before him, while above him is. $\boldsymbol{H}_{3} H d^{2}-w r w$ and below him a sacred barque. The second example (Fig. $27 b)\left({ }^{3}\right)$ forms part of an inscribed panel of Zoser discovered by Firth under the Step Pyramid at Sakkara. Here we see an ape, wearing, a priestly band over its shoulders, seated on a high recangular pedestal immediately over five supports YYYYY, with paws stretched over a bowl on a small stand, and with the inscription $\square$
 The third example (Fig. 27c)( ${ }^{4}$ ) is taken from a naos, clearly archaistic in inspiration, dedicated to Thoth by Apries and coming from Baklia; it is practically identical with (Fig. 27b) and once again the accompanying text read $\{$. Though the full meaning of these three examples still escapes us, there can be little doubt that they indicate some special connection between the ape ( $H \mathrm{~d}-w r$ ) and the number " 5 ", and Kees has produced conclusive proof of the connection between

[^24](9) Cairo $70008=$ Roeder, Naos, PI. 9 and p. 35, § $173^{\circ}$.

Hd -we and Thoth ${ }^{1}$ ). It may not be inapposite to recall here that it was suggested long ago by Ahmed Bey Kamal that at Baklia Thoth was worshipped as an ibis at Rhwy and as an ape at $B^{c} h\left({ }^{2}\right)$, and it is therefore not without significance that at Edfu the king is called "" ${ }^{2}\left({ }^{3}\right)$ ie. chief of the five (high priest of Thoth) at $B^{\circ}$. May this not be an indication that there was some special and close connection between the cult of the ape and that of the Five Gods?

There can be no doubt that the ape and the idea of "five" were closely associated, but it is not clear why

a

c

Fig. 27
they should have been. It is hardly likely that the idea could have originated in a cult of the ape which was linked up with that of the Five Gods. It may be suggested that perhaps there was at Hermopolis a cult of an ape who bore a name so similar to "" "five" that in course of time a pun on "five" was made and from this, in ways
${ }^{\left({ }^{2}\right)}$ Kresge, op. cit, 62. At Edfu' an ape seated on a tall rectangular pedestal
bears the same $\left\{\begin{array}{l}\text { 軎 }(1,533,7=\text { XII, Pl. 367). }\end{array}\right.$
(2) Abased Bey Kayal in Annates du Service, 7, 234.
( ${ }^{(3)} \mathrm{HI}, 250,10$.
still unknown to us, the whole idea of the cult of the Five Gods in special association with the cult of the ape may have developed.

Faint and uncertain hints are not lacking that this may have been the case. In the tomb of Petosiris one of the nine apes that praise $\mathrm{Re}^{-c}$, when he enters the $\mathrm{De}^{-1}$ 't is named $* Q \cap\left({ }^{( }\right)$. Lefebvre translated this as "le matinal", which is indeed not impossible, but it seems somewhat strange that the "morning ape" should praise Re ${ }^{-r}$ in the evening and it is permissible to wonder whether the word may, not be a nisbe diwy from diw "five" and whether diw diwy may not have been the name of the ape, just as we have already seen ( p .461 ) that $*$ 辛 is a name of Osiris Moreover, in Fig. 27 (a) the arrangzment of the numeral 1' 'before the seated ape is srange and may perhaps indicate that the ape is only the determinative of the name diw.

Finally, attention may be drawn to a passage in the "Book of the Day and the Night". In one of the cryptographic portions of this work it is stated that the spirits of the East (
 this decipherment of this text Dr. Drioton has sug-
 and has accordingly translated "Ce sont leurs corps aussi les scarabées" The objection to this is that the determinatives of $b_{3}{ }^{W} i_{3} b t y w$ and bntyw are apes, that the spirits of the East are never shown as scarab beetles but

[^25]are depicted with the bodies of apes, and it seems somewhat illogical to call them bntyw-apes and at the same time assign them the bodies of beetles. This difficulty disappears if we assume that the scribe has made an error and if we emend $ص$, which would permit us to translate "their bodies also are those of apes". It would not be the first or the last time that the scribe of the "Book of the Day and the Night" had made an error.

The last two paragraphs are admittedly highly speculative and it is for the reader to decide for himself whether this argument is well founded and worthy of belief. Nevertheless, even if this argument is not valid, there still remains so much indisputable evidence of the association of the ape with "five" that there is no obvious reason why the ape should not have borne or have acquired the value diw. I suggest, accordingly, that in the Ptolemaic period $\boldsymbol{A}$ acquired the values $\underline{d}, \underline{d}(d)$ from the word $d^{i} w_{0}$ which may be an ancient name of the ape.

It may, perhaps, be objected that ' '1' diw would give $d$ and not $d$, but here we are on very insecure ground. The question of the relations of $\Longleftrightarrow$ and $\}$ and the changes which they underwent is very difficult and one that urgently requires detailed study. Sethe long ago quoted words in which an original $\propto$ became ${ }^{(1)}$ and in Ptolemaic we have a very clear example of the same phenomenon in $\Leftrightarrow$ itself, which, like $\boldsymbol{A}$ is a common writing of $\Longleftrightarrow d d$, "say" $(\mathbf{\Sigma} \omega)$. If $\Longleftrightarrow d$ could represent
$d d_{\text {, }}$ there seems no reason why $\boldsymbol{\lambda}$ which could also represent $d d$, could not bave acquired this value through $\Leftrightarrow$ from diw.

The facts concerning $\boldsymbol{A}$ exhibit such a striking relationship or parallelism that they cannot all have been mere concidenoes. Thus we can see:-
(a) that $\boldsymbol{A}$ was beyond all doubt connected with "five".
(b) that both $\boldsymbol{A}$ and $\Longrightarrow$ were equivalents of $d d_{\text {, }}$
(c) that both these signs either directly or indirectly embody the idea "five":
(d) that of the two chief symbols of Thoth at Hermopolis, the jbis, the more recent one, through its connection with the Eight, was used in Ptolemaic writing as an equivalent of the numeral 8 (e.g. VII, 13, 2), while the ape, the older symbol, was in close connection with the number $5\left({ }^{1}\right)$ and probably with the Five Gods.

These parallelisms and the facts set out above cannot be due to mere chance. It would be foolish to claim that the origin of $\boldsymbol{A} \underline{d}, \underline{d} d$ in $d^{i} w$ has been proved beyond all dispute, there are still too many gaps and uncertainties in the chain of reasoning but this explanation does at least take into consideration and in part explain a whole series of clearly related facts which still remain without explanation if we seek to derive this value from $\underline{D} h w t i$. I am very conscious of the objections to this suggestion, "but they are much less than the objections to seeing in Dhwt the word of origin.
(i) To the best of my knowidege A is never used instead of 111 or $*$ to
XXX. however, may also be monoconsonantal in hd $h d$ "white crown" (VI, 295, 3). Cf. also ص. $\varphi_{-11}^{\text {e }}\left(\mathrm{V}, 187,14\right.$; cf. VII, 195, 1) tphtt wd $k s w_{0}$ an epithet of Maat.
XXXI. This use clearly originates in the conception of the $\operatorname{leg}(\sim \infty)$ of an animal as the equivalent of the human arm. $\underset{\text { Hes }}{ }$ and 'are so similar in meaning that in many cases it is difficult to decide in which way $\sim$ is to be read. There are, however, a number of cases in which ' is the only possible reading, e.g. ${ }^{2 a}{ }^{2}$ 의 (VII, 4,4) $r r^{t} d t$, "to the limits of eternity".
XXXII. The value im for is well attested in cryptograms of the New Kingdom ${ }^{1}$ ). The precise origin of the value $i m$ is quite uncertain. Possibly it may be derived from a word im, "skin" now lost( ${ }^{2}$ ), or it may have originated in a rebus similar to that by which o (Urk., IV, 46, 14; 49, 7) and (Spiegelberg-Northampton, Excacvations in the Theban Necropolis, 10*; the exact form does not exist in the fount and represents a fledling,题, in an egg) became $i m$, or on the similarity in the meaning of $i m$ and $m-\underline{k} n w$. In many cases in which written at Edfu it is not easy to decide whether one should construe it as $i m$ or the compound prepostion ( $m$ )-h $h n w$, but there are several clear examples, e.g. 暒 (VI, 307,

[^26]
 11-12). See Additional Note 3 on p. 497.
XXXIII. It is worthy of note that the only examples known to me of replacing occurs when closes the syllable.
XXXIV. The fact that $\xi_{\text {is occasionally equivalent }}$ to was first brought to notice by Piehl in PSBA, 14 (1892), 139-140, with an additional note on p. 141. Piehl quoted the examples $(c),(f)$ and $(g)$ below. The following are all the examples of this value known to me.
 his beauty when he appears as king of the people'".
 fies the temples with his beauties"
 he give him (di.f n.f) valour might and power". It seems very unlikely that $\oint_{0}$ here can itself be $n . f$ and the normal usage in similar contexts renders it improbable that we have here a sdm.n.f (di.n.f n.f).

 came forth in which was a youth who illumines this land with his beams; there was vomited forth a lotusbud (?) in which was a little maid (lit. dwarf maiden) whom the Shining One delights to see". The parallelism between $\oint_{0}^{\circ}$ and is a clear indication that we must read
$i m . f$ and that the translation "in which was a beautiful child" (Boylan, Thoth 117) cannot be upheld. $\overline{\text { © }} \Longrightarrow$ is unknown to me elsewhere, and while the general meaning is clear the exact transliteration is uncertain. Boylan's suggestion that it is an error for prh, is hardly possible owing to the feminine pronoun in $m$ - ln nt.s.
(e) 护 bright when thou shinest", unless $\int_{0}^{1}$ is an error for, $\bar{Z}$ which does not appear to be very probable.
 Behdet, great god, lord of heaven, he shines in heaven".
\[

$$
\begin{array}{ll}
\text { (g) } & \text { ² } \\
\text { terd) "T oive thee Punt }
\end{array}
$$
\] collated) "I give thee Punt and what is in it".

Another much less certain example occurs in $m$ ' ' ' (VI, 191, 21) mnfyt, "soldiery", for it is possible to take $\|_{0}$ as either $f$ or $n f$. Perhaps the scribe was influenced, wrongly, by

The exact process by which fould give rise to $f$ is uncertain, but there is an interesting phenomenon which should not be overlooked in this connection. Sethe ${ }^{1}$ ) has drawn attention to certain Egyptian nicknames (rn nfr) which are formed either by repeating one element of the full name or by giving that element in a modified form. In names in which nfr formed a part, and which

[^27]were not quoted by Sethe, the diminutive of $n f r$ is
 "Neferirues, whose 'good name' is Fefi.", and a man
 'good name' is Fefi'. There can be little doubt that in origin these two usages are not unrelated.
XXXV. Compare also the writing of $\$$
 "I gore the bodies of thy enemies" and 中 中
 my horns him who plots against thee". Cf, also the pun on $k h b$ in $\vec{E}^{\text {I }}$ 178, 15) "I gore him who comes against thee with evil intent". An alternative translation would be "I gore him who comes against thee as Seth ( $k h b$ )". It is possible that here is equivalent to $b$, from the frequent epithet of Seth as $B$ (e.g. IX, VI, 121, 10) but I have refrained from listing it as a possible monoconsonantal sign since it is doubtful, and I suspect that $Y$ is merely the ideogram $k h b$, with $\sim_{\square}$ as phonetic complements : cf. also Notes XVIII and LV.
XXXVI. The suggestion that $f$ is derived from A $\frac{1}{2}$ was first put forward by Sethe ${ }^{3}$ ). This appears to be as certain as any suggestion could be, for it is obvious, simple and direct and the closeness between Coptic ac and $f\left(\mathrm{q}_{\mathrm{f}}\right)$ is too striking easily to be ignored.

[^28]More recently however, Drioton has suggested that this value was obtained by acrophony, from "portion" ${ }^{(1)}$; it is difficult to see why so common a value should have been derived from so uncommon and distant a word when a much more obvious and simple word, $i w f$, is the normal term for "meat, flesh", particularly since $f d k$ is not specifically a portion of meat, but a portion of anything, even a portion of a country $\left({ }^{( }\right)$. Dr. Drioton has apparently been impelled, to seek an acrophonic origin for this value as a result of the false assumption that e obtained the value $w$ by aprophony from $\prod_{\text {e }}^{-} w^{\circ} b t_{\text {, }}$ "piece of meat". The chain of argument hardly seems logical or proven, and, moreover, there is no necessity to derive $w$ from $w^{c} b t$, for there is another more simple and direct explanation ready to hand.

One of the most frequent difficulties that faces the copyist of Ptolemaic texts is to decide in many cases whether the original has a or e. Particularly in texts where the signs are small, it is often impossible to decide which sign has been used, because the two signs are often so similar that on a small scale it is impossible to disentangle them. I have frequently been faced with this problem when working on Edfu texts from the origiinal or from photographs and when copying other texts, especially those on stelae, of the Late Period( ${ }^{( }$). There is no doubt that the ancient scribes met with the same

[^29]difficulty and in fact the sculptor in many instances may genuinely have attempted to cut $\bigodot$ and only succeeded in making a small sign that resembled e as much as e.

It is necessary, moreover, to take into account the fact that $e$ itself is a frequent substitute for a $f$ (see No. $316 d$ ). Here there can be no question of $w$ " $b t$ or any other word, and the only explanation is confusion between the two signs. This explanation is confirmed by such phrases as ceemill (VI, 94, 2) "hundreds and tens of days", where nQn is clearly an error for the correct ©®セ (cf. IV, 49, 1), and the only explanation is confusion between e and $e^{(1)}$.

These considerations all lead to the conclusion that there is no need to seek further than $i w f$ for the value $f$ borne by e, and that e, was used for e, and vice-versa through confusion between the two signs owing to their similarity, especially when written small.
XXXVII. It is possible to argue that the origin is 14 bik, "falcon" but this is quite unconvincing and I do not believe it. and are very common writings of $b_{3}$, "soul, spirit" of which many examples could be quoted: e.g. 80,5 ; cf. VI, 72,$15 ; 107,5$; VIII, 20,$10 ; 21,4$, etc.);


[^30] A Although I have not made a thorough statistical survey, I have the firm impression that at Edfu and are the normal determinatives of $b_{3}$ and that they occur much more frequently than and its variants. There is therefore no need to seek further than $b_{3}$ for the origin of the value $b$ that both and so frequently bear.

## XXXVIII. Hence is pn, "this" (VII, 33 4).

XXXIX. This example must be considered as exce, edingly doubtful. Chassinat (VIII, 5, note) notes that the bottom of the sign is missing and marks the whole sign as doubtful. Unless independent confirmation is forthcoming, therefore, this example should not be used as evidence. There is no doubt, however, that a sign equivalent to $\Omega$ originally stood here, for this is abun-
 $h r$ hy.f, "there is none like unto him". See Additional Note 4 on p. 497-498.
XL. $\mathbf{m}$ acts as a substitute for $n m$ as a result, of misinterpretation of the hieratic form of $\&{ }^{(1)}$. This simple misunderstanding had typically Egyptian results. Starting with the writings with $\mathbf{~ a s ~ i n ~}$ mun (I, 37, $8=\mathrm{XI}$, Pl. 221) nmst "nmst-vase", the automatic development was the separation of the signs composing 8 as in minc ess (IV, 28, 11) hnm,
(1) Cf. Spiegelberg's review of Junker, Grammatik der Denderatexte in Gotfinger Gelehrte Anzeiger, 1908, 123.
"odour, scent". The logical result of this was that the origin of $\mathrm{m}_{\mathrm{m}}$ in tended to be forgotten and the way was open to a variety of writings :
(a) $\Longleftarrow$ or $\uparrow$ was substituted for the original 㥐, as in $\stackrel{0}{\leftrightharpoons}$ (IV, 50, 4) knm , "odour";
 as in ${ }^{0} \bar{\circ}$ (IV, 62, 9) hnm, "smell"'; or
(c) mm and coalesced, as in $000(\mathrm{~V}, 89,6$ ), var. $\overbrace{0}^{0}($ III, 130,15$) \underline{h}(n) m t y$, "nostrils". In the case of such writings as $\mathcal{M}_{0}^{\circ} 0_{\text {(IV, 138, 11) it is }}$ uncertain whether was still considered to be equivalent to or was regarded as simple I am inclined
 $d_{3} m w$, "generations", and recommend the transliteration $\underline{h}(n) m t y$.
XLI. I have failed to find a single well authenticated instance at Edfu in which this sign is equivalent to mm. :
XLII. One's first impulse is to seek for the origin of this value in $b n w$, "phoenix", but second thoughts will show that all is not quite so simple. At Edfu, 2 is not the normal or general ideogram or determinative of $b n w$, which is the similar but quite distinctive sign
 Ptolemaic variant of the earlier $\underset{\lambda}{ }$, and its commonest

[^31] 8; cf. VIII, 107, 13) brw ntri.
value is $3 \underline{k}$. The group $\hat{\Sigma}_{i}$ is generally to be read 3ht, "field" but sometimes it is $t 3$, "land" ( $c f . \mathrm{V}, 85,10$ and $V, 45,3$ ). $\quad$ with the value $b$ is rare, and the most probable explanation of this value is that the ancient scribes confused $\sum_{2}$, and $\dot{\Sigma}$. This conclusion appears to be borne out by (No. 182).
XLIII. The origin of this value is quite uncertain. It may perbaps, be imagined that a species of duck or goose was called $w$, but no such name has come down to us. It is possible also that the value arose through confusion between and A hint that this is so is found in a variant at Dendera in S 3 (Mariette, Dendérah. IV, 40) where the second is clearly a substitute for $\}_{3} s r$. Dr. Drioton has drawn attention to other cases in which replaces a and other birds ${ }^{1}$ ).
 "birds". This must be considered somewhat doubtful since a word 24 (cf. VI, 56, 13) occurs not infrequently, but the writing with $\triangle$ and the parallel phrase in VII, 82, 2 speak against reading $p 3 y w$ in this case. The word ${ }_{s}$ 胃 hyw (hzyw), which I have suggested as the origin of this value, occurs frequently at Edfu, but almost always in the plural. It does not appear to be known to the Wörterbuch. It may be objected that R does not occur as the determinative of this word, but is so well-established as the normal determinative

[^32]of birds, replacing and other forms, that this is hardly a real objection, though it must not be ignored entirely.
XLV. $\beta$ Fß in the Late Period must have been equivalent to we, and thus Ptolemaic could write $\frac{\sin }{\beta \beta \beta}(\mathrm{V}, 2,6)$ for riwt, "joy" (pawe), and 1244 (IV, 5,7 ; note the exceptional var. 14 , VI, 21, 2) for shrw, "counsel, plans". The latter survives in Coptic in purwi $=\infty$


XLVI. At first sight this value appears to be extraordinary and inexplicable. I owe the following suggestion, which I think is almost certainly correct, to my friend Dr. J. Cerný. $\beta$, the feather obtains the general meaning of "wing" and hence by rebus that of the "arm" of the bird (of. Notes XLVII and XXXI). A further extension of the pun gave the "wing" the meaning of "side", and in this way $\beta$ acquired the value gs, both as ideogram and phonogram, which it bears so frequently in texts of the Late Period. Late Egyptian, however, uses $\overbrace{0} \circ$ rit instead of $g s$, "side", and Cerný suggests that the Ptolemaic scribe may have equated $\beta$ with $\sin 14$ and thus have obtained the value $r$ on the consonantal principle. Ptolemaic, not unnaturally owing to its archaizing tendency, normally uses $g s$ for "side", but rit clearly was not forgotten.
XLVII. [, as has been indicated in the preceding note, is regarded as the whole "wing" of the bird and hence as its "arm" (-0), in much the same way as and $\approx \sim$ came to be identified (see Note XXXI).
XLVIII. $\Omega$ and $\Omega$ are often made so alike in form that they are frequently indistinguishable the one from the other (cf. IV, 62, note 5).
XLIX. Sethe $\left({ }^{1}\right)$ derived $s$ from $\int$ if $a_{0}^{a} s w h t$, "egg". Ultimately this may be so, since $s$, "son", i.e. he who is in the egg, he who comes from the egg, is derived by rebus from swht, "egg", but there is no reason to doubt that the immediate origin was o S3 " "son", which was well-estab- $^{\text {a }}$ lished from the New Kingdom onwards. Note that swht, "egg" is sometimes synonymous with "child, son" (cf. IV, 303, 10, V, 185, 1).
L. Cf. also S'i' ra( (Wb.d. äg. Spr., I11, 411) and堶品 a a name of (Jequier, Frises d'Objets, 14).
 (VII, 269, 7) as feminine of 1 Ra in an epithet of a goddess.
LII. This value probably originated in some such name or epithet as ${ }^{\circ} 3 t$, name of a goddess (Piankoff, Le Livre du Jour et de la Nuit, 30). Cf. \$h ${ }^{\prime}(t)$ (VIIT, 66, 8), an epithet of Hathor as uræus?). A possible alternative may be $4 \Xi_{0}^{0}$ ใh irt "uraeus"" but this is not very convinoing.
LIII. The value $n(\Omega)$ for $h$ is suggested by

L": $\|_{\delta}(I V, 11,11) n$ t $n w-s n$, "without number".

[^33]If，however，$h$ is to be read it is， 1 think，impossible to translate the passage in it which it occurs witbout emen－

 offer a connected translation of entire passage unless it be assumed that a verb has been omitted．Assuming that a verb，probably $l p(r)$ ，has been omitted between
If and we can translate＂in order that their might may be increased by those who have not seen（them），in order that generations which have not（yet come into being）may praise them，and in order that their names may be uttered within the Great Seat＂．A some－ what similar example occurs at Dendera in the phrase ——1 LiM（Chassinat，Le Temple de Den－ darah，III，101，14）wnere unless $1 \subseteq$ is equivalent to AO＂mistress of names in the Two Lands，who has no image＂，once more a verb（ $)$ ？may have been omitted＂whose image is not（known）＂．

The origin of this value is quite uncertain．It might be suggested that $\ell$ and $I$ may be variants of $G$ and become $n$ by acrophony from the value ntrt，＂goddess＂ so frequently borne by $\boldsymbol{l}_{( }{ }^{1}$ ．In the present case，howe－ ver，this is not a satisfactory solution，partly because $h_{\text {，}}$ ， though very common，is never either mm or $\Omega$ at Edfu， partly because I know of no instances in which $l_{h}$ and Leither have the value ntrt or act as determinatives

[^34]to that word or to the name of any goddess，and partly because it fails to explain why their employment should apparently be restricted to being equivalents of $\sim$ The only suggestion I have to offer is that $n$ is perhaps derived ultimately from $Y_{h}$ ，a frequent equivalent of ○自的 which perbaps may have been construed as a a variant of $0_{0}^{0}$ innyt，but this is a somewhat wild speculation and I have no particular confidence in it．It is wiser to consider the problem as still unsolved．

LIV．While 穹，$t_{3}$ is clearly the immediate origin of the value $t$ ，we still seem to be as far as ever from dise－ overing how 突 itself came to be $t_{3}$ ．This is one of the oldest and most obstinate puzzles of late kieroglyphic and I have no suggestion to offer beyond the feeling that it may have originated in a pun．
 ings of the Egyptian word for Khemmis presents us with a problem of no little complexity and interest．Since some of the spellings I am able to quote were not employed by Sethe in his study of this word $\left.{ }^{( }{ }^{1}\right)$ ，it may be of interest to quote such examples as I have collected and briefly to set out the nature of the problem．It must be emphasised，however，that I have not listed all the examples of this word that occur at Edfu and that the following examples do not necessarily exhaust all the possible variant spellings，and therefore no arguments on statistical grounds can be drawn from them．The

[^35]following remarks aim rather at stating the nature of the problem than at giving the final solution．

The main outlines of the history of this word are clear．The original form was sh－biti，which was modi－ fied，by the omission of weak consonants，into $h b(y)$ ． This modified form，by the change of $b$ into $m$ ，led to the Greek forms $\chi \varepsilon \mu \mu \tau, \chi$ ，$\chi_{\mu} \mathrm{E}_{1 s}$ ．All these stages can be observed at Edfu：
（a）Historical writing．

（b）Intermediate stage．
9．$\theta_{i}$
（VI，74，2）
15． 0 －
（VI，138， 5 ；
$301,2)$
10．星 I
（VII，298，3）
16．曷监
（ $111,15,3$ ）
11．家 $\downarrow$
（III，191，11）
17．会 」以
（III，135，5）
12． 0 ． 1
（V，338，9）

13.0 数
（III，135， 4 ；

VI，187，7）
20．导11以＂＊（VII，65， 9
（c）Transition to Khemmis．
21．$\frac{18}{4}$
（V，255，12）
26．是 s
（III，311，4）
22．国
（VII，299，2）
27．友
（III，193， 4
Mam．，55，18）
23．Ens
（III，103，1）
28．\＄
（VIII，132，16）
24．

（VI，87，4）
29．
（Mam．，56，16）
25.
（III，135，8）
30．多悉
（V1，238，14）

All the writings in class（c）are based on signs which， originally at least，included $m . \ln 21-26$ the original val－ ue of the signs,$- \quad$（ - is an error for - ）and $\geqslant$ is $\mathrm{hm} m$ ，which has become hm by phonetic change，while ，which must be equivalent to $i$ or $i t$ ，gives a hint of a weak ending as in 19 and 20，In 27－30 资 itself has the value $l \mathrm{~lm}$ ，from $\infty$（IV，320， 7 （ $\mathrm{l} m \mathrm{mw}$ ， ＂children＂．It may be remarked here that this is the only bieroglyphic example of this word known to me， though it is known from Demotic and $\operatorname{Coptic}\left({ }^{( }\right)$．The spellings of class（c）clearly offer strong grounds for considering that $3 h$－biti and $l a b(y)$ had already acquired the value km ．

If this be so，what vocalisation do the variants in class （b）represent？Are they to be transliterated as $\underline{h} b(y)$ or $\mathrm{hm}(y)$ ？It is just possible，of course，that in this word the transition from $b$ to $m$ was so recent that forms with either $b$ or $m$ could be used，but this is somewhat
（＇）It may be remarked that in the personal name－ $\bar{\Delta} \overline{\bar{T}}$ ใ U
（ $(1)-\operatorname{rri} i-p(3)-d i-M n-t(3)-k m(Z \ddot{A} S, 50,42$ ，and P1．3，2b）the demotic version shows that ？bad the value $b m$ ．
improbable since 3,10 and 22 all occur in the same text, as do 13,17 and 25. Particularly instructive are 9 and 24 which occur in identical sentences uttered by Isis in the course of the dramatic section of the Myth of Horus ${ }^{( }{ }^{1}$. These two sentences must surely have been pronounced in the same way, and therefore it appears that $\int$ and $s$ have the value $m$ in spellings of this word, My preliminary and tentative conclusion, therefore, is that throughout the period covered by the texts at Edfu the Egyptian word that was originally spelled $i h-b i t i d$ had the value $h m$.

It still remains to decide how $\mathbb{k}$ and the other variants in class $(a)$ are to be analysed. It is obvious that in their present form they are to be explained as mechanical reproductions of historical, early writings and that their pronunciation, if they were ever pronounced $\left({ }^{( }\right)$, niust have been akin to that of the variants in classes (b) and (c). The question arises, therefore, did the scribes regard these writings as a phonetic transcription of the current pronunciation? If so, was it realised that the position of was due to honorific pre-position and that If was in reality the first element?

These are questions that it is difficult to answer with finality. It is true that if these were genuine phonetic
 $=$ N监 (VI, 87, 3-4). See the note on these passages in the translation and commentary on the dramatic text (VI, $60-90$ ) by Professor A.M. Blackman and the writer which will be published in $J E A$., vols. 29 and 30 .
${ }^{\left({ }^{2}\right)}$ It should be observed that there is no need to assume that these writings ever were pronouaced. The majority of them only occur in divine titles and in such in 1 (III, 193,3 , but not $\mathrm{It}, 24,8$ ) and 7 is there any they were actually spokea. Only uttered by an officiating priest.
transcriptions, it would be a simple matter to justify $\underset{4}{5}$, If on the consonantal principle whatever the position it be imagined that they occupied in the word. Neverthless, I make no attempt to append any such justification, for such procedure seems to savour too much of a game. I have the very strong personal impression that all the writings of class (a) are merely graphic, that if they ever were pronounced they were pronounced in accordance with the current vocalisation, and that the scribes never attempted to analyse them further. This is by no means a rare phenomenenon in any language. In English, for instance, the pronunciation of the personal names Marjoribanks and Beauchamp, to mention only two, differs considerably from their spelling, yet when the need arises one utters them automatically without a thought for their spelling. Similarly, we may write i.e. or e.g. where we would always read out or say "that is, that is to say" or "for example". without a thought for their origin in id est and exempli gratia.
LVI. Grammar, p. 468, Sign List L. 6).
LVII. , which is not of common occurrence, is used as a negative in a few stereotyped phrases of the form $\left\langle\wedge \mathbb{A} \|_{\wedge}(\mathrm{V}, 43,2)\right.$ "there is no withstanding his attack". Here it is clear that $\langle$ is equivalent to Middle Egyptian $\sim$, Late Egyptian and Coptic MN, it is not monoconsonantal and cannot be derived from J5 nhbt "lotus bud". I owe to Mr. Grdseloff the suggestion that the probable word of origin is to be found in $\ddagger$ 」 (Twnb "lotus bud" (the exact form of the determinative does not occur in the
fount : for the history of this word see Blok's remarks in Acta Orientalia, 8 (1930), 232), by phonetic change and metathesis.

It may be objected, perhaps, that $\ell$ is to be reas nhm and that is not impossible in view of. mmes
 may be argued that the full writing nhm is due to editing by a scribe who misunderstood the true function of $\boldsymbol{Q}$, that when $n h m$ is to read it is usually written with a ceterminative, $(\mathrm{V}, 399,1)$ and that the use of this phrase in the in the negative is well authenticated, e.g.
 negative is usually written in phrases of somewhat similar


The solitary instance known to me of the lotus bud
 "who overthrows the enemies of Horus in the Banks" (i.e. Egypt)". This value developed from $n n$ in accordance with the Consonantal Principle as defined below p. 513-514.

It is as well to point out here that although at various points in the Sign List I have indicated signs that acted as negatives (particularly Nos. 122-126), this should not be construed as an attempt to prejudge the thorny question of the reading of $\Omega$ and the other equivalents of the negative at Edfu. This is a long and complicated question and I do not yet possess a sufficiently complete documentation to give a final ruling. It is certain, however that there are many instances in which $\Omega$ and the other signs which act for it are equivalent to $\Omega$.
LVIII. On the change of into K , cf. Dévaud, Etudes de Lexicographie égyptienne et copte in Kêmi 2, 11-12, where it is suggested that at Edfu $\circ_{0} \mathbb{O}(I, 489,16)$, is equivalent to thr "fat". For an example from the
 (Baud and Drioton, Le Tombeau de Roÿ, p. 30; cf. Grapow in Sitzb. Preuss. Akad.d. Wiss. (Phil.-Hist. Klasse), 28 (1938), 330, note 1). See also Setke, Verbum, I, § 255.
LIX. Dr. Drioton ${ }^{1}$ ) has suggested that
(Vl, 133, 1) is to be read hpr, $\&$ being equivalent to $h$. An examination of the context shows that this reading cannot be sustained. The word in question occurs at the beginning of Section B of the Myth of Horus ( ${ }^{2}$ ). The Legend of the Winged Disk (Section A of the myth) ( ${ }^{3}$ ) concludes with a series of explantions of the winged beetle and other divinities and with a description of a powerful charm for the protection of the king with the words

$$
0 \Rightarrow \text { (V1, 131, 3) "a winged }
$$

beetle in writing shall be made on his breast when he sees trouble". It is these words that are immediately taken up at the beginning of Section B of the myth: 4.㿽 133,1 , which is followed immediately by $d d m d w$ and the cartouche of the king. It is clear therefore that these words introduce new section, but refer back to something previously mentioned. In order to indicate this, these words are preceded by $\ell \diamond$, and it is not possible to start with $\underline{h} p r$ alone, quite apart from the fact

[^36] 26. (3) JE A., 21, 26 Jf. ; VI, 109-131.
that kpr nktm is not the normal phrase．It is necessary therefore to analyse 1 鲜 as 10 莶 as an equivalent of 1 （Vl，131，1）and to read ir $p\left({ }^{3}\right)^{\text {＇bb }}{ }^{(1)}$ ．The whole passage is accoordingly to be translated＂Concerning the winged beetle of best quality gold（ $k$ tm mmh）on a piece of＂god＇s cloth＂which the king placed at his throat when he saw trouble and strife＂．The positions of and - were inverted in order to give a better grouping， cf．I1（VIl，10，4）for 1 （VI，13，14）in＇Imn．

LX．The origin of this value is uncertain．Possibly it is due to a pun，111，representing a small tract of land or a field with reeds，may have been interpreted as Bi＝1 $w$ ，＂district＂and thus have acquired the value $w$ ． This is pure supposition which I am unable to prove．

LXI． 7 was undoubtedly biliteral originally and had the value $n n$ ，but whether it actually retained this value in Ptolemaic texts or whether it has become simple $n$ in certain cases is quite problematical．I am inclined to suspect that it had become monoconsonantal $n$ ，but pending a detailed survey of the circumstances in which the sign is used，it is best to leave the question open．

LXII．$\simeq$ is considerably more common in this sense than $\leadsto \sim$ ，which is somewhat infrequent．～구 is equivalent to $h$ in（III，107，5）．

LXIII．The sign represents a block of stone（normal value $i n r$ ）and is different from $\varpi$（No 247）for which，
（1）is the correct ideogram and determinative of＇bb but 盆）occurs not infrequently，e．g．$\downarrow$（Mam．，146，13）．
bowever，it acts as an occasional substitute．The com－ paratively few examples which I have noted all come from vols．V and VIII，particularly the former．

LXIV．It is possible，but not very probable，that in here and in the numerous variants is biconsonantal it and that ${ }^{2}$（or the signs that replace ${ }^{?}$ in the variants） is the phonetic complement．In suggesting that is monoconsonantal 1 have been influenced by the following considerations：（a）by the Ptolemaic Period the feminine ending must certainly have disappeared；（b）in spellings of itn is never clearly biconsonantal or accompanied only by $n$ ，but is always followed by signs equivalent to $t$ and $n$ ；this seems to indicate that the spellings are fully alphabetic；（c）the use of in in（III，135，8）and other spellings，of Khemmis（cr．the variants listed in Note LV）．
 118,10 ）wn $m w$ ，＂be disloyal＂and $1 \| A$（VII！，132，3） htp $h r m w$ ，＂be loyal＂．Note the rare spelling $\mathrm{m}_{\mathrm{c}} \mathrm{mm}$ $m w$（Cairo 565 （Dyn．XXIV）＝Borchardt，Statuen und Statuetten，II，115）； 1 owe this reference to Mr．Grdseloff． See also Drioton，Annales du Service，41，108， 109.

LXVI．$\square$ is to be distinguished from - （No． 243），see Note LXIII．$\square$ is the early form of（No．248）， which is the normal and most frequent Ptolemaic form．

LXVII．Comparatively rare at Edfu，but common in Dendera texts．

LXVIII．Cf，oso（Pyr．1162） and $\sim_{0}$ a $($ No． 1,6$)=\mathrm{Pl} .3$ ）．
LXIX. Confusion between $\square$ and $\square$ is not common at Edfu, but in other sources where the signs are small or the scribe prone to carelessness they are frequently apt to interchange. Cf. ym (Urk., II, 51, 8) for $n h m$ "rejoice" and $\frac{\square}{\Lambda}$ (VII, 290, 3) for $\frac{\square}{\Lambda}$, and $7 \frac{\pi}{\Lambda}$ for $7 \stackrel{\square}{\hat{\Omega}}$ (Urk., II, 191, 8 and often), See Additional Note 7 on p. 527.
LXX. In " ( $1 \mathrm{~N}, 152,5$ ) nlan, "stripling", however, $\infty$ is probably $n h n$, the original value of this sign as a variant of $(1)$, the two mm being the phonetic complements. While the origin suggested here is the most direct and simple explanation, it is not impossible that in giving the value $\underline{h}$ to this sign the scribes were influenced by - (No. 233 b).
LXXI. Cf. the somewhat similar wsrt (Düm. ichen, Baugeschichte, 43, 4, quoted by Junker, Schriftsystem, 29).
LXXII. The monconsonantal nature of $\mathrm{f}_{\text {in }}$ spellings of $h^{h} w$ is rather uncertain, and it may be biliteral. However, in view of the tendency for $\quad$ to weaken or fall away when followed or preceded by $\%$, it is not impossible that in this word it is equivalent to simple 6. Cf. Notes IV and LXXVI.
LXXIII. Two clear instances are known to me :
 (III, 190, 12) "with my fingers". A rather doubtful example is 897 (Mam., 80, 12) "like my Majesty", where it

[^37]is a moot point whether $\bar{q}$ is the determinative of $h m$, the suffix being omitted, or whether $\bar{\eta}$ is itself the suffix.

Two further uncertain examples may be mentioned.
 14 = Iunkèr, Stundenwachen, XVIII, 83, p. 118) "I have opened a way to my brother" (or alternatively, Junker's translation, "Horus has opened for me a way to my brother"), where once again 7 may be either the suffix pronoun (in this case, however, 1st. pers. sing. fem.) or the determinative of $s n$, the suffix not, being expressed.
伿 $\square$ (I, 208, 5 = XI Pl. 293) "I give thee my office, my seat, my throne and my possessions in this land", here it is uncertain whether 9 is the suffix ( $m$ being omitted), or whether, 1 is the suffix, $\rceil$ being an error for $\uparrow$.
LXXIV. The real origin of this value has yet to be found, but it may be suggested that it is probably to be sought in a name, now lost. of the - -headdress. It is not inappropriate, however, to draw attention to a word which has not been mentioned in this connection. A stela of the Ethiopian Period mentions a headdress
 cf. also 9 (Jéquier, Frises d'Objets 7). Is it impossible for the value $k$ to have originated in this word through the transition of to (к) ? (cf. Note
${ }^{(1)}$ The form employed in the original differs sllightly, the uraeus having two small horns.

LVIII）．The obvious objection to this suggestion is that since ，is such a common equivalent of $k$ ，one would have expected to have found at least one or two examples of a word＊．Although no such word is known，this suggestion may be worthy of consideration in default of a better．

LXXV．In this most elaborate form this sign rep－ resents a folded piece of cloth with fringe combined with $\prod^{(1)}$ ．It is essentially a combination of a word－sign or determinative（ $س$ ）and its phonetic complement（ $\Omega$ ），the complete word undoubtedly being sist $\left(^{2}\right.$ ）．This analysis， if correct，would explain how itself could occasionally have the value $s$（see No． $313 b$ ）．

LXXVI．Ptolemaic scribes often confuse $\}_{\text {and }}$ ． The two forms are much alike and if a careless scribe om－ its the cross－strokes，as be frequently does particularly in the early parts of the temple，they are indistinguishabie．

LXXVII．The ${ }^{\circ}$ ．which occurs so frequently in spellings of llwd＂enrich＂and related words，while pos－ sibly indicating a weakening of the original $d$（though Joes not usually have this function），is due to a false orthography on the part of the ancient scribes ${ }^{3}$ ）．

LXXVIII．Wh．d．äg．Spr．III， 353 transliterates htm（ $\mathrm{ht}-\mathrm{mn}$ ？）and is apparently only aware of examples in which this word means＂world＂．At Edfu，however， a，by no means uncommon，name of Egypt is

[^38]（III，188，13），运鲁（VII．58，10） ktm ，＂fortress＂${ }^{( }{ }^{1}$ ）， with which $000_{0}^{\circ}$ and its variants are sometimes synonymous． $0_{0}$ is almost invariably Egypt，the fortress，impregnable，protected，from which the enemy， particularly the enemy from Asia，is repelled or driven out，but it is not always easy to decide whetber eo is to be translated＂world＂or＂fortress＂（Egypt）．There are，however，a number of clear examples．In the two following examples can be no doubt that we are to read
 ■ いた。 $P r-w r$ ，thou hast ruled Pr－nsr，thou hast ruled the Fortress， thou hast united the Two Portions which were divided＂； Ennorew （VIII，62，16－17）＂strong ${ }^{2}$ ）of arm in the Fortress，hero，great of strength，who protects Egypt from str［ife and guards］（ ${ }^{3}$ ）the Fortunate Eye＇（Egypt） from evil＂．Similarly，comparison with such phrases as （VABE（VIII，144，3）＂who repels the enemy from the fortress＂，renders it probable that htm ，＂fortfess＂．

[^39] determinative．

is to be read in (VI, 287, 1) "who drives away Be (Seth) from the Fortress", and OI Mur $Y_{0}^{0} 0_{0}^{0}$ (VIII, 143, 14) "smiting thy enemies in the Fortress". On the other hand, "world". is possibly but not certainly a better translation than "fortress":
 "thou art come in peace, O prince rich in fields, with numerous meadows in the world", and 1 mincosmum A〕… [many, "83] fields in the world with all kinds of sweet fruits".

It is clear from the examples quoted that in this word l, and are equivalent to $m$. and that we can safely transliterate htm . This conclusion is supported by various spellings of $h s m n$, "natron" and its derivatives, The spellings $8 \prod_{\circ} \rightleftharpoons$ (III, 122, 16) and $\rightleftharpoons$ (VI, 70, 1) are clear indications that they are equivalent to Coptic
 are to be transliterated $\operatorname{hsm}(n)$.
LXXIX. The distinction drawn here between $\mathbb{C}$ and and their variants is, 1 feel, somewhat artificial. appears to be the normal Ptolemaic equivalent of $\mathbb{M}$, but Ptolemaic makes no serious effort to distinguish © from E and both signs are to all intents and purposes fused, and either can equally well represent $g, g r, \underline{h r}, n s t$ etc. They are so alike in use that I have thought it confusing and needlessly pedantic to separate them still further and to list between Nos. 227 and 278 which, strictly speaking, would be its proper position. The variants occur much less frequently than $\varangle$ and $\mathbb{E}$, which are the forms in common use.
LXXX. Dümichen $\left(^{1}\right.$ ) suggested that $\varangle$ acquired the value $n$ by acrophony from $n s t$ in the three following examples from Philae $\left({ }^{2}\right), \rightleftharpoons \pi$ rdi.n.f, "he gave": mntyw, "Asjatics", and Ne tp.sn sn n.f $t_{3}$ "their heads kiss the earth for (i.e. before) him". It would be better to suspend judgment on these examples until the copies of Brugsch and Dümichen have been collated. Whether they are correct or not, the examples of $\triangle$ and $\mathbb{E}$ quoted in Nos. $302 b$ and $303 e$ are certain. There seems to be no necessity to adopt Dümichen's suggestion of the acrophonic origin of $n$, for the more direct explanation appears to lie in the great similarity between and when the former is cut carelessly or on a small scale. At times the two forms are almost indistinguishable and often tine scribe in attempting to cut one or the other only succeeded in producing a sign that was quite indeterminate. An instructive example is a phrase which was printed in I, 132, 6 as 1$\}$ photograph (XI, Pl. 261) shows is really to be read ! $\triangle \square \square$. In this example $\triangle$ is made the same size as $\sigma$ and but for a slight broadening of the base is almost identical with $\delta$. It is easy to see how both the ancient scribe and the modern copyist could on occasion have confused the two signs.
LXXXI. A further possible instance of ${ }^{\text {D }}$ being
 6-7) "who overthrows the enemies in the Place-of-slaughter-ing-the-Foe". I am inclined to think that these two examples are due to having been used in error for $\uparrow$.

[^40]It is not altogether impossible，however，to argue that＂ might have become $m$ through phonetic change from $\dagger_{8} 7$ 县 nd，＂ask＂since，as is well known，＂中 weakened to $n t$ in 十乙（VI，102，3）nt，＂rules＂or in the feminine of the genitive and hence might have given rise to simple $n$ ．If any confidence is to be placed in this explanation，however，it would be desirable to prove that was at least sometimes equivalent to $n$ ，but this is a point about which I am very doubtful．I am not aware of a single instance in which $\boldsymbol{q}^{2}$ replaces mm in the spelling of words．occurs not infrequently as the genitive，feminine，e．g． of Great－of－Justification＂（an epithet of Horus）．中 also occurs in a number of cases where in texts of earlier periods one would expect either mm or ${ }_{1}$ ，but in most of such examples I am inclined to doubt whether is really the masculine genitive $n$ and it seems to be more likely to be equivalent to Coptic nte．Thus in $\qquad$ †呈（V，321，1）＂this seat of the falcon＂，in N $\Delta 十 \mathbf{A}$＇el＂（ $\mathrm{V}, 287,13-14$ ）＂great chieftain（ lri i tp）of all the gods＂or $O$ Rforn of（VII，6，6）＂until year 16 of His majesty＂${ }^{\text {中 }}$ seems to be employed in the same way as NTe and I should prefer to transliterate $n t i^{(1)}$ ． Those cases in which＂${ }^{\prime}$＂is neither the feminine nor apparently equivalent to NTE are infrequent，e．g．
 darkness with the light of his eyes＂，but even in such

[^41]examples I hesitate to state at present that ${ }^{1}$ was undoub－ tedly $n$ ，for the Ptolemaic uses and forms of the genitive are confused and urgently need careful study and analysis and pending the completion of such a study it seems wiser to be cautious．For the time being，therefore，I suggest with due reserve that＇ $\mathcal{1}$ is an error for $\uparrow$ ，thougb it may be necessary to revise this opinion when more material is available．

While correcting the proofs of this paper，examples have come to my notice of a use of which has a bearing on the subject under discussion．There are a few cases in which ${ }^{\circ}$ is employed instead of f：e．g．
 products which are in them＂；$\uparrow \$$（IV，168，16） ＂those who are in his train＂；干ץe＝（IV，97，6） ＂between his eyebrows＂．
$\uparrow$ itself is used for＂in I decided matters of dispute＂（ $n d w t-r$ ），which occurs on a fragment of the base of a statuette of the Late Period in the possesion of Dr．Puy－Haubert of Alexandria．It was Mr．Grdseloff who drew my attention to this example and enabled me to examine the original．

## ADDITIONAL NOTES

Dr. Drioton, who was kind enough to read the manuscript of this paper and who is not in agreement with much of the theoretical section, has drawn my attention to a number of points, some of which, with his permission, I am glad to quote.

1. Note X, p. 450. Grdseloff, however, points out to me that $f$ as a divine name appears to have existed at an early date and occurs in the Sixth Dynasty in the
 personal name 40 " (The god) ' I is his protector"' (Urk., I, 113, 16 ; cf. J.J. Clére, Notes d'Onomastique in Révue d'Égyptologie, 3, 111, No. 29.


Fig. 28
2. - (No. 159, p. 415). Although it is generally agreed that - represents an elephant's tusk which presumably had the value h.w., no example of this word has yet been discovered. It is now possible, however, to make a suggestion that seems to point more definitely to the existence of this hypothetical *hw. In the XVIIth Lower Egyptian Nome there is a district named $\frac{8}{4}$ (Sethos I, Abydos: Dümichen, Geog. Inschr., I, pl. 91), (J) (Sethos I, Gurnah : Brugsch, Dict. Géog., 1271). With the kind permission of Dr. Drioton I am able to quote the earliest example known to me of this name which occurs on the still unpublished kiosk of Senusret I at Karnak as $\|$ \&
the kindness of Dr. Abul Naga). Here we apparently have a word $h \mathrm{w}$ "elephant" which is presumably a nisbe derived from *low "elephant tusk". If this suggestion be accepted, it is opposite to quote the analogous English use of "tusker" to describe a grown elephant with developed tusks.
M.A. Varille informs me that traces of a similar spelling of the place name $h w$ occur on an unpublished block (Inventory No. K. 1759) of Amenophis I forming part of a similar nome list. This and other blocks from the same building of Amenophis I (a small peripteral temple similar to the kiosk of Senusret I, cf. Varille, Karnak, $\mathrm{I}, 16$ ) were found by Varille reused as foundations in the Temple of Mentu erected by Amenophis III at Karnak.
3. Fry (No. 162 and Note XXXII, p. 467-468). Dr. Drioton points out that this usage occurs as early as the Coffio Texts and quotes De Buck, Coffin Texts, I, 54 $j ; 68 a, 121 b$.
4. $\mathbf{A}$ (No. 172 and Note XXXIX, p. 473). Further consideration of the use of this sign as a negative bas revealed certain points which ought to have been obvious to me from the outset.

If $\mathbf{\Delta}$ is correct and if it were really monoconsonantal, it is clear that acrophony does not afford a satisfactory explanation of its origin, for we are faced with a choice of alternatives. Moreover, in the passage quoted in Note XXXIX it is clear that $\wedge_{\text {全 }}$ is equivalent to Middle Egyptian $n$ m wn. A múst therefore be biliteral
and ntr cannot be the word of origin. How then is this value to be explained? There seem to be two possibilities: the negative use of $\mathbf{4}$ may be derived from either imnt "west" or $n b$ "lord". The first of these alternatives is to be preferred, for although I do not know of any Ptolemaic example of $\mathbf{\Delta}$ imnt "west" (Ptolemaic normally used $\boldsymbol{\phi}$. or their variants), the employment in old texts of and in writings of $i m n t$ "west" and imni "right") cf. Pyr., $1156 c$; 1252c; De Buck, Coffin Texts, I, $86 a, b$, etc.), the less frequent use of itself as imnt "west" (De Buck, op. cit, I, 116a; $121 b$ ) and imni "right" (De Buck, op. cit., $1,6 c$ ), as well as Ptolemaic imnt (VII, 196, 11) all indicate that in Ptolemaic it was not impossible that imnt should be implicit in $\mathbf{\Lambda}$. Any attempt to seek the origin in $n b$ "lord" is open to the objection that such a derivation is less direct and more involved, for this sign is $n b$ "lord" and never the adjective $n b$ "all, every". Since Coptic distinguishes between $n b$ the noun and $n b$ the adjective, which are nhb, weh- and nree respectively, it is unsound and dangerous, in spite of the known fact that $b$ and $m$ interchange, to postulate a phonetic change which Coptic indicates did not exist.
l must stress once more, however, that since the exact form of this sign is uncertain, it cannot be quoted as evidence and discussion of its probable origin is more academic and theoretical than practical. The only certain fact is that at this point in the original there once stocd a sign that was equivalent to $\Omega$.
5. (No. 176(b), p. 418). Dr. Drioton very kindly sent me an advance copy of his recent note on
this sign (Bulletin de l'Institut d'Egypte, 25, 11, note (f)), though unfortunately too late for any reference to be made to it in the main part of this paper. He has suggested that $\mid \backslash\rfloor-\square(V I, 68,2)$ is to be read $i b w$. Although I find myself unable to accept his interpretation of this word and the passage in which it occurs (an alternative rendering will be found in the translation and commentary on the dramatic section of the Myth of Horus to be published by Professor A.M. Blackman and the writer in J.E.A., vol. 29), Dr. Drioton is entirely correct in assigning the value $w$ to this sign in certain words. Under the stimulus of Dr. Drioton's suggestion I have found a number of examples of this usage at Edfu which I had overlooked in the preparation of my original draft. As far as my present notes go, its use is confined to three words: it occurs frequently in $\bigvee_{N}^{e} \mathrm{E}(\mathrm{V}, 124,3)^{c} w t$, and somewhat less frequently in $1+\underset{\sim}{\square}(\mathrm{V}, 223,14)$ $i b w$, a plant, and $\|\rfloor \pm$ (IV, 68, 6) ibw a title.
6. (No. $248 f$, p. 433). Dr. Drioton writes: "Origin : variation de $\sqsubset=m$ ( $m$, "bassin")". The suggestion is plausible but impossible either to prove or disprove. It would be desirable to have clear Edfu examples of with the value $m r$. In the present example, however, if the origin $m r$ be adopted 1 should be inclined to consider that is not monoconsonantal $m$ but biliteral $m r$ with $\varnothing$ as the phonetic complement.
7. $\square$ (No. 253 b, p. 434 and Note LXIX on p. 488). Dr. Drioton writes: "Est-ce vraiment une erreur? Le remplacement de $\sqsubset$ par $\sqcap$ est presque universel sur les stèles d'époque romaine". The question is quite open, but the impartial use of forms such as $\square$ and $\square$ for both $\square$ and $\square$ suggests error or confusion.

8. $\sigma$ (No. 304 b, p. 443). "Et si, pour expliquer
 43, 102 ?)". A suggestion every bit as probable as the one I have suggested, and in conformity with the definition of the consonantal principle given on p. 505. I have a completely open mind on this point, and feel that a final binding conclusion is impossible until the ideas behind the formation of phonetic values have been studied and codified more completely taking into consideration both monoconsonantal and multiconsonantal signs. This study is at the best only an introduction to one section of the signs used at Edfu and the answer to many of the problems that arise or the choice between possible altérnatives will only be forthcoming when they can be duly weighed against the results of the study of the whole body of signs and the system of writing that will emerge from that study.

## D.-ORIGINS

An analysis of the origins which bave been suggested in the preceding sections of this paper reveals that the alphabetic values originated in the following ways :-

1. By direct representation, by an extension of the the use of ideograms or word-signs.
2. By the Consonantal Principle( ${ }^{1}$ ).
3. By Acrophony.

[^42]4. By the use of old signs either in new forms or from different aspects.
5. By confusion between signs, (a) genuine confusion between similar signs, (b) scribal errors.
6. By phonetic change or fusion with related phonemes.
7. From the bieratic, either by adaptation of hieratic forms or by misunderstanding of the hieratic.
8. By rebus.
9. By convention( ${ }^{1}$ ).
10. Graphic reasons( ${ }^{(2)}$.
11. For reasons unknown.

The origin of a given value often lies in only one of these reasons, but frequently the value is the result of the combination of two or more factors. Most of the ways in which the values could originate are obvious and furthercomment would be superfluous, and the following discussion is therefore concerned only with the first three factors, Direct Representation, the Consonental Principle and Acrophony.

## 1. Direct Representation.

The use of word-signs in Egyptian to give the names of the objects depicted needs no discussion for it is one of the fundamental usages of Egyptian writing at all periods. Such word-signs, though frequently employed in Ptolemaic with multi-literal values, do not act as alphabetic signs except in certain strictly specialised cases. Nevertheless,

[^43]it is only an extension of the ideographic principle that a word-sign, instead of giving the name of the thing depicted, should in certain cases represent a pronoun referring to the person speaking or spoken to. This use is strictly limited : in the Ptolemaic period it is confined to the suffix pronouns 1st person singular, masculine and feminine, 2 nd person singular feminine, 1st person plural and the dual. In theory the figure or figures of any human being, god or goddess could act in the appropriate context as one of these suffix pronouns. In prePtolemaic texts the chief signs employed in this way are通, 気 and 4, and a few variant forms, for the 1st person singular masculine, and, in Late Egyptian, if for the 1 st and 2 nd persons singular feminine.

It is by a further extension of the same principle that F (No. 269) can also act as a suffix pronoun, for if 9 ntr means "god" there is no logical objection to its being used to express "I" when a god is speaking, in the same way as in earlier periods $\boldsymbol{A}$ can act as the suffix 1st person singular masculine.

The origin of the use of $\mid$ as the suffix 1st person singular masculine and feminine is, perhaps, less obvious but it may also be due to the same process, since ifor superstitious reasons replaced human figures in religious texts( ${ }^{( }$) and thus it could play the same part as the sign for which it was substituted. Ptolemaic in using 1 in this way merely continued a usage established at least as early as the Coffin Texts.
${ }^{(1)}$ Cf. Lefebvre, Grammaire de l'égyptien classique, p. 24, § 27 , end.

What is puzzling is that the use of these signs was not extended to the other suffix pronouns The explanation that they were perhaps the determinatives of the pronouns hardly seems adequate and fails to account for the fact that the suffixes of the second and third persons, except the second person singular feminine, are never represented by similar signs. It may have been the difference in the meaning of the pronouns that precluded the extension of the ideographic principle to all of them. It is possible, moreover, that a considerable part of the original nominal meaning of the word-signs may still have clung to them when they were used as pronouns, for " 5 means "Thoth says" and also "I (Thoth) say". In this respect the situation is not altogether dissimilar from that of a child who is learning to talk, for the average child at first has difficulty with his pronouns, especially that of the first person, and will say, for instance, "May John have a cake ?" Where he means "May I have a cake? "

The use of word-signs for the first person plural is probably to be explained in the same way. Once it has been admitted that the picture of a given person can represent not only the name of that person but the pronoun "I" when he is speaking of himself, it is a natural development to argue that two or more figures can represent the pronoun "we", provided the figures are those of the persons who are speaking or who are imagined to be speaking.

The origin of the suffix second person singular feminine is perhaps less clear. The explanation is hardly likely to be the same as that for the pronouns of the first person since in that case one would have expected
to find male figures acting for the second person singular masculine. It is possible that the figures of women and goddesses came to be considered as adequate substitutes for the pronoun because their association as determinatives with the feminine ending ${ }_{0}^{a}$ and its variants almost inevitably attached to them the value $\underline{t}, t$, and the tendency to write the suffix as 0 , or variant, plus a female figure can only have increased the temptation to assign the values $\underline{t}$ or $t$ to female figures and to regard them as legitimate writings of the suffix second person singular feminine. Once this was granted or admitted the argument came round to the full circle and any figure that could represent the suffix first person singular feminine could be replaced by $\Delta, \leftrightharpoons$ or some similar combination by mechanical substitution based on the faulty assumption that since a female figure could replace a etc. in the second person, then o etc. could replace any female figure in the first person.

Whatever the true explanation of these phenomena may be, it seems reasonably clear that in using these signs the phonetic aspect was less prominent than the purely graphic, the signs had little if any phonetic value. It is this that probably explains the fact that none of these signs are used in the spelling of other words and nouns with the values which they appear to have acquired as pronouns. The apparent exception that the figure of Thoth is sometimes equivalent to $Q$ is not in contradiction with this observation, for the origin of this particular value is to be sought elsewhare (see pp. 450, 496).

It is hardly necessary to add that this attempt at explanation is highly speculative and far from being established conclusively. These remarks are offered as
suggestions and in no way as statements of fact, for further research into the nature and use of the suffix pronouns will be necessary before a solution can be found to the problems which have been briefly indicated in the preceding lines.

## 2. The Consonantal Principle( ${ }^{(1)}$.

It is now generally admitted that the normal alphabetic signs appear to have originated in words composed of one strong consonant and one or more weak consonants which disappeared or fell away ${ }^{2}$ ). These weak conso, nants originally seem to have been only $3, \vec{i}, w$ and the feminine ending $t$, but in the course of time $r, \underline{t}, d$ and $\underline{d}$ all shared this weakness and could be dropped. These weak consonants could fall away from any part of the word, beginning, middle or end.

The tendency among the majority of scholars seems to be to separate the alphabetic signs from the system generally known as "group-writing" or, much less accurately, "syllabic writing" ${ }^{3}$ ), whereby a number of biconsonantal signs are employed as though they were monoconsonantal. It is difficult to see why this distinction should be retained since the principle that underlies the formation of the alphabetic signs proper and the use of certain signs in group-writing is essentially the same and consists of the employment of signs in which
(י) In connsction with the following remarks much valuable and interesting material will bs found in Edgerton's paper, Esyptian Phonetic Writing from its Invension to the Close of the Nineteenth Dyrasty in Journal of the American Oriental
Society, 60,473 -506 though it will be notied that I differ slightly from him in one or two points of detail.
(9) Cf. Sethe, Der Ursprung des Alphabets, 119-124, 151-157.
(3) For the following see in particular Edgerton op. cit., 486-494, who quotes most of the examples given below, plus many additional ones.
only the one strong consonant is retained while the weak consonant or consonants are dropped．The difference between the two seems to be that whereas most of the ＂normal＂alphabetic signs have lost their original multi－ consonantal values almost completely，the signs used in group－writing retain both monoconsonantal and bic－ onsonantal values．This difference，however，is not a genuine one，for $\}$ ，which is universally recognised as alphabetic $d$ ，retains its original value wodyt down to the Ptolemaic Period，and in addition to its alphabetic value $\underline{h}$ retains its original value $h t$ through all periods and in Ptolemaic，for phonetic reasons，even acquires the additional value $\underline{h} r$ ．

The earliest example of group－writing known to me occurs on a seal of the Third Dynasty in which $]$ is used instead of o in the name of the woman Snt－Nt（Fig． 29 p．508）${ }^{(2}$ ）．

In the Pyramid Texts a number of group－writings occur：－

2．is used for $s$ in certain forms of the verb $m s$ ，＂go， transport＂e．g．；imperative 4 组 $\left.{ }^{2}{ }^{2}\right)$ and the perfective relative $\vec{k}^{(3)}$ and $\underbrace{(4)}$ and also in $4 \overrightarrow{\xi_{A}}\left({ }^{(5)}\right.$ ， var． 4 ．${ }^{(6)}$ is，＂go＂；

[^44]Por is used for h in $\underset{\sim}{(1)}$ hns，＂traverse＂， －Mnn（v hnf，＂cook；bake＂， $1 \rho f_{d}^{(3)}$＂$h s r$ ，repel＂， and 0 人 epithet of gods hostile to $\mathrm{Re}^{\mathrm{c}}$ ；
$\int$ is used for $s$ in $\nabla d\left({ }^{\circ}\right)$ ，var．$\forall j \rho\left({ }^{7}\right) ~ h \mathrm{~ms}$ ，＂sit＂；
$f$ is used for $t$ in $f \circ f \circ\left(^{8}\right)$ thth，an epithet of gods bostile to $\left.R \bar{e}^{*}, ~ \& \propto\right)_{\text {men }}{ }^{(9)}$ ir．t．n $H r$ ，＂that which Horus did＂（perf．rel．），时息 $0 \cap\left({ }^{10}\right)$ imyt．s，＂that which is
 for ${ }_{a}^{m m} \bigcap_{\mathrm{mm}}$ ，independent pronoun third person plural； $\Delta$ is used for $\underset{d}{\text { in }}$
After the Pyramid Age other group writings occur sporadically，ranging from such words as mhr，＂granary＂to the rebus ${\underset{\min }{\mathrm{m}}}_{\mathrm{O}}^{\mathrm{m}}\left({ }^{18}\right) m-h \underline{h} w$ ，＂in＂．They
（）Pyr． 798 c ．

（i）Pyr． 1150 b（P）；cf． 2158 a（N） 2158 c（N）
（4）Pyr． 1701 d ．
（i）Pyr． 1701 c （M．N
（9）Pyr． $57 c(\mathrm{~W}), 622 b$（M．N）．
（1）Pyr． 129 b（M．N）．
（i）Pyr． 392 d（W．T．N）．
（I）Pyr． 807 （P．N）．
（10）Pyr． 532 b（T）．
（1）Pyr． $532 b$（P）．
${ }^{(1)}$（1）Pyr．1650， 1651 （N）．
（4）Pyr． 1651 （M）．
${ }^{(12)}$ Pyr． 766 c；cf：766a，788b，all in N ．
（a）Parari，Denderzh，Pl．XVIII．（Dyn．VI－VIII）
（a）See Sethe in ZAS．，59．61－3，with two additional examples quoted by Edgerton，op．cil．， 491.
are employed not only in hieroglyphic but in hieratic also
家1 1 Arsill ${ }^{(2}$ ) srmt; name of a drink. They do not become frequent, however, until the New Kingdom and find their most developed expression in the so-called "monumental cryptograms" of the New Kingdom and the following periods.

In the Ptolemaic Period decorative writing of the same type as the "monumental cryptograms", in which group-writing played its due part, became even more common; it was used not only in the "randinschriften"
door-jambs, architraves, and ceilings as in the case of the monumental cryptograms,
 but was also employFig. 29. ed in the ordinary texts on the walls of the temples, though rarely in its most developed form. There is no apparent break between this developed, decorative Ptolemaic writing and the earlier monumental cryptograms, in general it occurs in exactly the same places in the temples, it employs the same principles and its subject matter is approximately the same, and 1 can see nothing cryptographic in either the one or the other $\left({ }^{3}\right)$. Both in Ptolemaic writing and in the "monumental cryptograms", the manner in which the sigos used acquired alphabetic values
${ }^{(1)}$ (1) Ebers 56,$17 ; 58,4 ; 63,10:$ with slight modifications 61,$21 ; 26,18 ; 31$, 18; 60, 7 .
( ${ }^{( }$) Ebers 67,$18 ; 88,23 ; 104,19$; cf. also 24,$1 ; 35,7-8 ; 54,4.15 ; 83,10.13$.
(3) It should be emphasised that for the time being these remarks are applied only to monumental cryptograms.
forms part of one and the same consecutive, historical tradition of writing that can be traced without a real break from the Old Kingdom onwards.

Edgerton( ${ }^{1}$ ) has cast doubts on Sethe's view that group-writing originated in predynastic times and considers that commenced in the Fifth Dynasty. It is hard to subscribe to this view. If we find an example of group writing as early as the Third Dynasty, may not further examples be forthcoming as our knowledge of earlier texts is increased? Moreover, if it is true that group-writing was invented in the Fifth Dynasty, it is surely very peculiar that the next group-writings that we can find did not use the forms which we encounter in the Pyramid Texts but other new ones. If the group-writings of the Pyramid Texts were the outcome of some new procedure, we ought to find some of them at least, plus additional signs, in the immediately succeeding periods. The fact that we do not do so affords strong grounds for suggesting that these group-writings are not a new invention, but a survival.

If we stop to consider the manner in which the normal, standard alphabetic signs came into being, it must seem unlikely and illogical to suppose that the Egyptians quite arbitrarily selected a handful of signs to act as monoconsonantal signs when they must have possessed a considerable number of signs that could have acquired monoconsonantal values by dropping their weak consonants. It seems more logical to suppose that there must have once been a time, of which all traces have admittedly been lost, when the Egyptians employed quite a variety of signs
(1) Edgerton, op. cit., 489 and note 37.
that had monoconsonantal values. This multiplicity of signs must have presented the Egyptian scribes with the same sort of difficulties that confront the student of Ptolemaic hieroglyphic to-day, for the profusion of alternatives does not exactly conduce to speedy decipherment. Thus, it may be suggested, it became desirable to reduce and standardise the number of monoconsonantal signs in normal, general use, and thus the Egyptian "alphabet" with which we are familiar may have come into being, Nevertheless, Egypt being Egypt, what had once been was never lost, and group-writings could be used at will, at any time, without any affront to the rules of writing, though as a matter of convenience at first they were never frequent. However, the sporadic and haphazard nature of the early group-writings is precisely what might be anticipated if they were a survival and not an invention.

The question of why group-writing was revived, particularly in and after the New Kingdom, and why it was so widely used in the Ptolemaic Period is best discussed with reference to the whole body of Ptolemaic signs and accordingly only a summary sketch of the probable reasons is attempted here. Four main motives can be distinguished :
(a) decoration and a desire to increase the decorative effect of the hieroglyphic texts( ${ }^{1}$ ) ;
(b) archaism, partly as a conscious or unconscious. reaction to the entry of foreigners and foreign influences into Egypt, but probably to a greater degree as a result

[^45]of the "rediscovery" of the Pyramid Texts, and probably other early texts, in Saite times ;
(c) a form of inferiority complex, foreign domination resulted in a deliberate attempt to impress foreigners with the mystery and antiquity of Egypt, by emphasising all that was different and typically Egyptian ; this tendency showed itself in more than one way, but in writing it took the form of a deliberate attempt to increase and emphasise the mystery and strangeness of the outward form of the hieroglyphic texts;
(d) an effort to indicate in part the contemporary pronunciation; this was only a minor motive, it seems to have been concerned largely with indicating the changes in consonants but not the vowels, except perhaps in a few cases; it was never generally and regularly operative but when applied it was in the main with real knowledge( ${ }^{1}$ ).

In none of these motives can there be detected any trace of an attempt to obscure or hide the content of a text, and if this decorative method of writing resulted in a text being more difficult to read, this was purely incidental and not deliberate. In fact, decorative writing to a very. large extent left alone the ritual and those texts which one might imagine to have been secret and concentrated mainly on what was well known, the common divine names, the commonest divine titles and above all on precisely those texts whose contents there was every reason to have well known.

[^46]In addition, however, to the falling away of weak consonants, two further aspects or applications of the Consonantal Principle have to be considered.

A sign may acquire a monoconsonantal value if originally it was composed, with or without additional weak consonants, of either two identical consonants or two consonants so closely related as to be practically identical, but such consonants must be in direct juxtaposition. In such cases, for purposes of writing and sometimes even in pronunciation, the signs were considered as having one consonant only. Thus we find (No.2) $n$ from $n n$, 埧 (No. 7) and its variants is $h$ from $h h$, - (No. 175 and Note XXXIX), originally mm or nm , is $m, \simeq$ (No. 239) is $m$ from mnt, 〕. and 1 (No. 289) and (No. 313), which normally have the value mn, have the monoconsonantal value $m$ (cf: Note LXXVIII), and $\gamma$ (No. 291) and t (No. 292) are $g$, apparently from wgg. In these cases there is no question of acrophony, the component strong consonants are either identical or so closely related that for purposes of writing they are considered to be one and not two: This assimilation or coalescence of identical or related consonants, which has also been indicated above in the case of $\rho$ and (No. 248 d, cf. Note XLV) is not confined to individual signs but can be observed in Coptic also. Thus, to quote a few examples only, we have MNefe "Memphis" from Mn-nfr, enge "eternity", from $n h h$, , zout "priest" from $h m$-ntr, or ${ }^{200 \mathrm{~cm}}$ "natron" from hsmn. The process, therefore, is in itself nothing strange to Egyptian but is a natural result of the development of the language ${ }^{1}$ ).

[^47]Finally, , ـ, which originally was not one of the weaker consonants, falls away when in direct contact with \& as in (No. 16c.) and perhaps also in $\mathrm{H}_{( }(\mathrm{No}$.265) and $\mathcal{f}$ (No. 27خ). Here the explanation appears to be that when in contact with $\frac{8}{8}$ there was a tendency for $\rightarrow$ to become $\Omega$, which, being one of the weak consonants, could fall away leaving \& alone.

As a result of this lengthy discussion it is now possible to attempt to define the term "consonantal principle". The term "consonantal principle" is applied to the process by which, under certain definite conditions, a multiliteral sign, having been reduced to one consonant only of its original consonantal skeleton, is employed as a monoconsonantal or alphabetic sign. This surviving consonant could occupy any position in the original word, the important factor being not whether it occurred at the beginning, the middle or the end of the word, but the fact that it was the only strong consonant. In the Late and Ptolemaic Periods the conditions under which this reduction could take place were three in number :-
(i) When the consonantal skeleton consists of one strong consonant and one or more of the weak consonants $\mathfrak{i}, \vec{i}, w, r, t, \underline{t}, d$ and $\underline{d}$. It may be surmised that even in those cases where the word of origin appears to have one radical only, as $t$ from ${ }_{i} t$, it is probable that the word was originally at least biliteral.
(ii) When the consonantal skeleton contains, with or without other weak consonants, either two identical consonants or two consonants so closely related that they are
practically the same, such consonants being indirect juxtaposition and not separated by any other weak or strong consonant.
(iii) When the consonantal skeleton contains, with or without other weak consonants, $\%_{8}$ and $-\infty$ in direct juxtaposition, in which case there is a tendency for $\rightarrow$ and the weak consonants, if ariy, to fall away leaving $\&$ alone. Instances of $\quad$ falling away when in contact with signs other than $\frac{8}{8}$ are very rare and appear to belong to a later stage.

It will be noticed that although many of the signs that have monoconsonantal values are also word-signs or ideograms, a considerable proportion only occur elsewhere as "determinatives". There is a tendency in some quarters to regard the determinatives as "dead" signs, devoid of any phonetic significance ${ }^{1}$ ). In my view, it is impossible to explain in a satisfactory and scientific manner either the monoconsonantal and multiconsonantal values borne by Ptolemaic signs or the spellings of many words unless it be conceded that practically every so-called determinative always retained its full and appropriate phonetic value. There are, it is true, a very few generic determinatives for which phonetic values cannot be claimed, 1 should not, for instance, claim that was a phonogram in most of the words in which it occurs, but such signs are exceptional and can almost be numbered on the fingers of the hand. It is unreasonable to think that these "determinatives" should be without phonetic significance at one moment, and then at

[^48]another moment be used phonetically with multiconsonantal or monoconsonantal values simply because they were determinatives. If a determinative could at times be used with multiconsonantal or monoconsonantal values derived from the words which it determined, this must have been because it always retained its full phonetic nature. This is surely the scientific basis of the fact that in practice almost any determinative, except a limited number of generic determinatives, can act as a phonogram with the value of any word that it determines.

Since the hieroglyphic system of writing was originally ideographic in form, every hieroglyphic sign must originally have been an ideogram. Egyptian, like other languages, had many synonyms and one ideogram could legitimately represent several words. If, for instance, a scribe wrote the sign H , there are numerous cases in which it is impossible to decide whether the scribe intended to write $i_{3} w, d w z, h f, s n s$ or a number of other words, and it is only when other multiconsonantal or monoconsonantal signs are added that it is possible for the reader to tell which of the legitimate values of the ideogram the scribe had in mind. In short, the true determinatives in hieroglyphic are not those which are habitually called the determinatives but those phonograms and alphabetic signs which when added to the word-sign indicate which of a number of synonyms the scribe had in mind when writing.

## 3. Acrophony.

The part played by acrophony in the formation of the Egyptian alphabet is a matter of no little importance and interest and one on which some divergence of opiniont
exists. In 1916, Sethe $\left({ }^{1}\right)$ in his study of the origin of the alphabet stated that the idea of acrophony was quite foreign to Egyptian and asserted categorically that it played no part in the formation of the Egyptian alphabet. In the following year ${ }^{2}$ ) Sethe modified this sweeping statement and voiced the opinion that in texts of the Graeco-Roman period and in cryptograms there was a limited number of signs having monoconsonantal values for which apparently only an acrophonic origin could be suggested and quoted a number of such signs that occurred in Ptolemaic texts and in cryptograms. Sethe's argument is not strengthened by the fact that it is possible to explain on the consonantal principle or in other ways some at least of the signs and values which he quoted, and indeed he seems to have realised that the final word had not been uttered and was careful to note that some of these apparent instances of acrophony might in reality be explained by some form of pun.( ${ }^{3}$ )

In recent years Dr. Drioton has devoted a series of important studies to the decipherment of Egyptian cryptograms and has attempted to analyse the principles on which cryptography was based and to formulate the rules governing the formation of the values used. (4) The two most striking features of the system of writing that emerges from these studies are the dominant part which Drioton suggests was played by acrophony in the formation of the monoconsonantal values and the largely alphabetic

[^49]nature of the spellings, these two features being interdepen dent. It may be remarked in passing that, even accepting Drioton's decipherment, it is doubtful whether the cryptograms contain many monoconsonantal signs as he suggests, and it is certain that many signs for which an acrophonic origin has been suggested can be explained either on the consonantal principle or in some other way. In fact, in his most recent paper ${ }^{1}$ ) Drioton admits that many values which he had previously suggested had originated in a form of acrophony (acrophonie consonañtique) ( ${ }^{2}$ ) were formed by application of the consonantal principle.

It remains to see what part was played by acrophony in the texts of the Ptolemaic Period. As far as Edfu is concerned, in this paper there are listed 320 signs, in addition to a number of variant forms, that between them represent 484 monoconsonantal values. Ahalysis of the origins that have been suggested in the preceding sections of this paper reveals that these values were formed in the following ways:-

| Consonantal Principle | $355\left({ }^{3}\right)$ |
| :---: | :---: |
| Direct Representation | 103 |
| Unknown | $19\left({ }^{(4)}\right.$ |
| Acrophony | 5 |
| Convention | $1{ }^{(5)}$ |
| Graphic | $1\left({ }^{6}\right)$ |

 however, that Drioton's conosption of the consonanatal principle difiers somemwat
from mine, it is more restricted and many of his examples of acrophony are in my view examples of the consonanatal principle as defined above p. 505 .
${ }^{(2)}$ Annales du Service, 40, 385 (No. 3 [ $=$ ici, p. 152]), 397 [ $=$ ici, p. p. 170]. (3) Tha values that originatid in the Consonantal Principle may be analysed thus: (a) direct, by dropping, of weak consonants, 191; (b) by phonetic change
of values açuired under (a), 83 ; (c) by confusion or errors, 49 ; (d) by rebus, 10 ; of values acyuired uader $(a), 83$; (c) by confusion or
(e) irom the hieratic, $5 ;(f)$ by assimilation, 87 .
(9) Including 7 values by phonetic change from values of unknown origin.
() Only 111 (No. 314c) for w.
(1) Oaly foe (No, 135) for b.

It will be noticed that the five signs that are apparent examples of acropbony are in reality only variants of one and the same sign $\rightarrow$, so that the evidence for acrophony rests on a particular use of a single sign. It is obvious, therefore, that at Edfu there is an overwhelming body of evidence against acrophony. Even if all the values of unknown origin proved to be acrophonic, which on the law of averages is clearly unlikely, the position would not be materially altered. Acrophony appears to have played, at the best, but an insignificant part at Edfu in the formation of monoconsonantal values and it is inevitable that doubts should arise concerning the accuracy of our attribution of acrophonic origins to these values.

It would have been desirable to complete this survey with an accurate and final analysis of the monoconsonantal signs and values employed in the other temples of the Late Period. Unfortunately this is not possible at present, partly because of the enormous mass of material involved and partly owing to the incomplete nature and doubtful accuracy of much of the published material. I have made, however, incomplete and unsystematic studies of the original or photographs of texts at Dendera, Esna, Karnak, Deir el-Medina and Tod and have read other published texts from these temples and from Philae,Kom Ombo and Medamud, in addition to a number of miscellaneous sources. The general impression obtained from this reading, which I must emphasise is not thorough, final or complete, is that there is no evidence of any marked increase in the use of acrophony in these texts, though it is possible, particularly towards the end of the

Graeco-Roman Period, that there may have been a very slight increase in values which apparently and with our present knowledge can only be explained by acrophony.

Attention may be drawn to a few exceptional cases at Esna in which the only origin that can be suggested at present seems to be acrophony. These examples occur in the following spellings of the name of Khnum, $\boldsymbol{J}^{9}{ }^{(1)}$,
 acrophony plays no part in the variants 3 and es ( ${ }^{4}$. These spellings, however, are quite exceptional, 1 have failed to find any indication that their apparent use of acrophony is in any way typical of the other inscriptions of Esna and I suspect that they owe their form to the desire to give the name of Khnum a particularly decorative appearance.

It is true that in a number of older publications it is stated that certain signs have aequired monoconsonantal values by acrophony or that a number of signs and values that occur in such publications appear to have acrophonic origins. Some of these claims and copies I bave been unable to check, but very few, if any, of those that I have been able to trace will survive close examination, and in general it will be found that these claims and apparent values are not correct and are due partly to inaccurate copies, partly to faulty analysis of the texts and misunderstanding of words and signs, and partly to incomplete knowledge of Egyptian vocabulary. Indeed, as our knowledge of

[^50]Egyptian texts and vocabulary grows, there is a steady decrease in the number of signs and values for which acrophony is apparently the only explanation. It would not be difficult to quote a quite considerable number of such cases, some have already been mentioned in this paper; and the following signs are quoted merely to serve as examples:-
© : Dümichen ${ }^{1}$ ) has quoted three words from Philae in which $\triangle$ is used instead of mmn and has argued that value $n$ was obtained by acrophony from nst. It has been pointed out above in Note LXXX (p 493) with reference to $\triangle$ (No. 302b) and (No. 303e) that even if Dümichen's copies are accurate this value did not originate in acrophony.

* : this sign occasionally has the value $s$, e.g. ${ }^{*}\left({ }^{2}\right)$ $s m w$ "vegetation". The immediate origin, however is not $s b_{3}$ "star" but the late form of the same word which occurs as $\rho_{11}^{e} \star\left({ }^{3}\right)$ in hieroglyphic and which survives as cio $\gamma$ in Coptic.
 "moon". Such spellings as $\ddagger$ 长 $\phi^{9}\left({ }^{5}\right)$ and the numerous variants of this word at Edfu and Dendera indicate that the true reading is not $i \%$ but $i w n-h^{c c}$. This is also the view of the Wörterbuch. ( ${ }^{6}$ )

2. that this sign bad the value $n$ at Dendera is attested by Junker ${ }^{7}$ ) but there appear to be no examples of this

$$
\text { (2) ZÄs., } 1 \text { (1863), } 51 \text { : }
$$


${ }^{(3)}$ V, 352, 6. Cf. Spitgallbra, Demotische Grammatik, \& 3.
$\left.{ }^{( }\right)$) Bivasce, Thesaurus, 511.
(c) $\mathrm{V}, 49,6$.
(o) Wb. d. äg. Spr., $1,53$.
(1) Juaker, Schrifstystem, 26.
usage at Edfu. In my experience this is not a common value and I suspect that many of the apparent examples of this value are to be explained otherwise, owing to misunderstanding of the phonetic values of and its variants and of the structure of the words in which they oocur. The current view appears to be that \$n acquired the value $n$ by acrophony from $\mathrm{Cm}_{\mathrm{m}}^{\mathrm{mm}} n$ "vulture" because that word is preserved in Coptic as norpe (S), worps (B). This view is entirely mistaken and is an excellent illustration of the dangers that accompany any attempt to suggest origins, whether by acrophony or by any other means without studying all the uses of the signs concerned.

Nr is one of the many values that bears in Ptolemaic It occurs in $n r t$ "vulture", and in aNo ", (1), Dn ${ }^{2}\left({ }^{2}\right) n r^{\prime}(t)$, which is the Ptolemaic form of Late Egypian ${ }^{\mathrm{mm}} \mathrm{f} f \circ$ and which is partly a synonym of rnpt "year" and partly an expression of time with somewhat wider and looser significance $\left({ }^{3}\right)$. $\quad$ Nri $(t)$ survives in Bohairic as NeI. A further use of 'An', not common at Edfu but rather more frequent at Dendera, is as an

## (1) VI, 263, 6.

(I) IV, 7, 10.
(') The Worterbuch ignores the full spellings with and wrongly lists all examples of and equivalent to rnpt, but the reading $n r i(t)$ is assured by comparing IV, 7,10 with VII, 6,4 or IV, 115, 4 , with IV, 238, 11 and by numerous other examples; cf. also VI, 195, note 4, and Liverpool Annals of Archaeology and Anthropology, 25, 136, note 4. A further note on this sign will be found in the commentary on.
VI, 61.5 to be published in $J E A$., vol. 29 in the translation and commentary on the VI, 61.5 to be published in JEA., vol. 29 in the translation and commentary on the
dramatic portion of the Myth of Horus by Professor A.M, Blackman and the writer.
 "be sees his city in festival", or $\prod_{115}$ ann $\|^{(2)}$ "within (for $<m>$ hnt) thy city Edfu". It is clear that this writing could only have developed as a result of some similarity between the vocalised forms of niwt and a similarity which clearly did not exist in notpe or even in the purely monoconsonantal n. Although the Coptic form of niwt has not come down to 'us, Greek evidence indicates that in the Late Period it was equivalent to $v \eta^{(3)}$, and the chain of development from N $n r^{i}(t)$, MEI to ${ }_{\Delta}^{\otimes}$ is immediately apparent. These facts demonstrate that 'An had two forms, one of which always retained $r$ as in norpe, and another which lost the $r$ as in Net, from which acquired the monoconsonantal value $n$ on the consonantal principle.
$\rightarrow$ : the values $p$ and $t$ which this sign bears are among the best known examples of apparent acrophonic origin. With regard to $p, \square \rho$ 体 $\rightarrow$ appears to be the only word known at present from which this value could have been derived. Although for the time being I can make no other suggestion, it would not be surprising if eventually the origin proved to be a still unknown woid pwi, or perhaps $p_{3 i}$. The origin of the value $t$ is usually presumed to indications tf "spit". At Edfu, however, there are which this.value there may have existed another word from which this value could have been derived on the consonantal principle. It would be premature to express ady

[^51]final opinion on this point at the moment for my enquiries are not yet complete, but it is hoped to return to this matter in the near future.

These considerations obviously do not prove that acrophony never played any part in the formation of the monoconsonantal values. As long as a single value exists that can only be explained by acrophony it is not possible to deny that acrophony may have played its part, though perhaps only a very limited one. On the other hand, it is quite clear that until we know every word that was used in Ancient Egypt and until the manner in which hieroglyphic signs acquired their various values has been throughly studied, analysed and digested, it is impossible to state categorically that a given value could bave originated only by acrophony. In the present state of our knowledge it would appear that, with the doubtful exception of certain cryptograms, acrophony was not typical of Egyptian and was not in general use as a factor in the formation of monoconsonantal values. At Edfu, if the results of the present study are accepted, acrophony played at the most only an insignificant part, so small a part indeed that none of the apparent instances of acrophony can be accepted unquestioningly, though no alternatives can be suggested at present. There is no evidence that there was any radical difference in procedure in the other temples of the Late Period.

It would appear to be a sound rule in attempting the decipherment of hieroglyphic texts of any period never to have recourse to acrophony as an explanation of origins unless all other attempts at explanation have failed. Wherever possible origins should be sought in the Consonantal Principle because thereby it is possible to obtain
a more precise and unequivocal answer to the question of origins, the possibility of producing alternative versions of one and the same text is reduced, and our ability to control and check individual values and the decipherment as a whole is increased. Acrophony on the other hand has precisely the opposite effect : it frequently fails to indicate the exact origin, it is often the cause of the creation of two or more alternative versions of the same text, all of which must therefore be viewed with suspicion( ${ }^{1}$ ), it is a cause of error, and it reduces very considerably the cbances of controling results

[^52]
## E.-ADDENDA AND CORRIGENDA

Grdseloff*, after having read this paper, has given me a number of comments and suggestions some of which with his permission I am glad to reproduce. I take this opportunity of inserting a few additional remarks and corrections. With the exception of $3,5,6$, and 14 , all the following notes are based on Grdseloff's observations the material he has quoted.

It should be made clear that Dr. Drioton's paper "Procédé acrophonique ou Principe consonatal ?", which immediately follows this paper**, was written entirely without reference to these Addenda. Dr. Drioton's paper was based on my original manuscript, which I lent to him before it was sent to the press, and on the galley proofs, and these Addenda were not accessible to him until his article was in page proof. Similarly, these present notes were all drafted and completed before I had any knowledge of the contents and nature of Dr. Drioton's remarks which were only known to me when he kindly gave me a set of his page proofs at a time when I had already practically finished correcting my own proofs. This explanation will, I hope, help to account for the fact that in one or two points Dr. Drioton and I appear to anticipate each other, in actual fact our remarks were made entirely independently and became known to each of us too late for the necessary modifications to be made.

[^53]1．陯，No．29，and 愌，No． 30 （p．395）and Note V （p．449）．Grdseloff suggests that in the examples quoted in Nos． $29 a$ and 30 媳 and 悀 are not alphatetic but as the ideogram $i k$ ，which is derived from $Q \square$ 隃 ＂quarry man＂，the writing $\int 4 / h^{\prime} \square$ 筑＂four falcons＂ being particularly significant．This suggestion，is much to be preferred to mine and the text should be emended accordingly：The value 3 （No：29b）bolds good，how－ ever，and is obtained on the Consonantal Principle from 4］险。

2．No． $176 b$（p．418）．Grdseloff points out that the writing $\ \backslash\rfloor=\square$ for $\operatorname{inb}$ arose out of the as－ similation of $b$ to $n$ giving $m$ ．The combination $n b$ could be rendered by $J$ only as in 4 』4Q非（Famine Stela，Sehel，line $11=$ de Morgan，Catalogue des Monuments， 80 and fig．on p．78）．It is worthy of note that in $\mid \mathcal{N}-\square$ it would appear that $\leq$ is a later addition or correction since it is small and squeezed in bigh up between $f$ and $I$ ：for the exact grouping see XIII，Pl． 500.

3．（G，No．196，C．No． 197 （p．423）and Note LIII，p．477－479．As a result of further consideration and of readings in Edfu building texts with some friends and colleagues the doubts I bave always felt atout the
reading of these signs have crystallised．I now consider it most improbable that these signs are monocon－ sonantal or equivalent to simple $\Omega$ ．I would suggest that they are really equivalent to $\Omega$ ．It will be recalled that I have already suggested that should be supplied in Chassinat，Le Temple de Dendara，III， 101，14．In VII，4，2－3 suits the context at least as well as the $h p(r)$ I originally suggested and would make excellent sense in IV，11，11，which would thus be brought into line with customary Edfu usage．It cannot te mere coincidence that the only examples of these signs known to me should all occur in contexts in which a verb is apparently missing and the reasonable course is to assu－ me that the missing verb is present in the signs them－ selves．I am unable to explain the origin of this value．

4．No，No．221，and Nos．222b， 223 and Note LXI， p．486．Grdseloff remarks that Sethe pointed out long ago（in Garstang，Mahasna and Bet Khallâf，20）that 7 had
 Binotris $\sim$ n $r n w$ ，whick occurs on the Palermo Stone
 in Late Egyptian the hieratic text of the battle of Kadesh bas $77=7 \downarrow$ ，where the hieroglyphic texts have
 285 （218））．Grdseloff doubts whether $\mathcal{Z}$ was originally biliteral $n n$ ，but in that case the precise word of origin is apparently unknown and must presumably have been a word＊nw or＊nwt＂rush＂now lost．Loret（Griffith Studies， 304 ff ）equated $77{ }^{\text {min }}$ with Coptic norne： noris，but this equation is not yet proved．

5．$\nabla, N \mathrm{No}$.236 （p．430）．Grdseloff asks whether $h$ could not have been derived from $\$_{0}^{0}$＂field＂．While this is not impossible，it is also certain that at Edfu $\triangleright$ acts as a substitute for - as determinative of words denoting teeth，e．g．nhdt，tst as ideogram ibh，and also as the phonograms $b h$ and $h w$ ．For the present，therefore，I adhere to my original view．This usage，of course，originally arose through a misunderstanding of the hieratic form of $\qquad$
6．M，No． $239 e$（p．430）．It should be noted that the singular $\stackrel{\text { min }}{\text { an }}$ is not known to the Wörterbuch nor，to the best of my knowledge，has any example of it ever been quoted，not even by Drioton who first made the suggestion． This word always occurs in the dual denotes the cliffs that delimit the Nile valley．It is a reasonable assumption，bowever，that there must have been a singular form $\underset{\text { min }}{\text { derived．}}$（ from which the dual was

7．$\square, N o .253$（p．433）．Grdseloff asks whether with the value $p$ is not after all merely a graphic variation （an error）of $\square \mathrm{Cf}$ ．the confusion between $\square \square$ aqd $\square$ noted under No．253b．

8．■，No． 254 （p．434）．In spite of the Wörter－ buch，Grdseloff doubts whether the word $\mathrm{D}_{\mathrm{I}}$ Worter－ exists．In the Pyramid Texts 回 is a variant of whe wh （cf．Pyr．59c，214c，807b，1069a，1749a，and numerous other variants）．If Grdseloff＇s doubts are justified，the value $h$ of r＂is to be derived from N－hyt＂portal＂． Grdseloff points oui that the identity of $\Omega$ and $i=w s h t$ is proved in the Old Kingdom by the expression wsht －（Pap．Berlin 886），recto，a VIth Dynasty papyrus from Elephantine）， 1 P

287；292）．The opposite process whereby 9 is．written for $a h$ is attested in the word $\mid$ 品 $K \mid\{$ Prentice Duell，Mereruka，I，Pl．80）．

9．＇ß，No． 267 （p．439）．（Grdseloff point out that originally there appears to have been a pot which bore the name bs（cf．also du Mesnil du Buisson，Les noms et signes égyptiens désignant des vases ou objets similaires， 79 ff ；though I am rather inclined to doubt his conclusion that this was a lamp）．This pot was spouted（Fig．30）（1） and it was through a degradation of form and confusion that the form $\square$ arose，which in turn was confused with $\AA$ ．

The chain of development，apart from the instances quoted in the preceding footnote，is apparent in the following spellings of the name of the god $B 3-p f$ ：
$\square 71$（Tomb of Meresonkh III， Giza，unpublished）＊，碞浯，



Fig． 30. $334 a$ and Sethe，Kommentar，Il 17）， 71 \＄Ten
（unpublished statue of Queen Tis found by Selim Bey Hassan at Giza）， 1 （Brugsch，Thesaurus，28）．

10．－セ，No． 293 （p．440）．Grdseloff remarks that －e－represents the bolt - －around which is twined the string by which the bolt is drawn（cf．KönigSberger，Die Konstruktion der ägyptischen Tür，41）and thus－e－with the
（＇）From a drawing made by Grdseloff in the Tomb of Meresonkh III at Giza
（in the first example quoted of $B 3$－pff）．A somewhat similar if not identical form （in the first example quoted of $B$ B－pf）．A somewhat similar if．no
occurs in the Pyramid Texts，e．g．Pyr． $1098 \mathrm{c}, 1378 \mathrm{c}$ and 1478 c ．
＊Edited in 1974 by W．K．Simpson as First volume in the series＂Giza Masta－ bas＇＂．See D．Dunham and W．K．Simpson，The mastaba of Queen Mersyankh III，
N．H．，1974．D．A．
value $S$ is only a variation（variation matérielle）of $\rightarrow$ ． This is a more satisfactory explanation than mine and I accept it，Moreover it appears to be confirmed by the substitution of $\rightarrow$ for - e 3 s in $\rightarrow S($ II，41，2）； cf．Junker＇s note in Z．̈̈．S．，43， 119.

11．\＆，No． 297 （p． 441 ）．Hitherto no convincing ex－ planation has been advanced for the value $h$ borne by $\&$ ． Grdseloff suggests that the value is derived from $h^{e} t$＂wick＂，and that it is for this reason that $\frac{8}{}$ is used as the determinative of $\sqcup \&{ }^{\ell} \mathrm{tk}_{3}$＂torch，candle＂（Sethe， Zur Geschichte der Balsamierung，pl．11；cf．Sснотт in Z．̈̈．S．，73， 8 and Wb．d．äg．Spr．，III，39）．

12．No． 302 （p．442）．It is generally agreed that $\boxed{4}$ represents a pot－stand which occurs in a variety of form（cf．Mittof ${ }^{\prime}$ ungen des Deutschen Instituts für ägyptische Altertumsinunde in Kairo，IV，25，fig．36；26， figs． 37,38 ）but bitherto its name has not been brought to notice．Grdseloff points out that the name of the $\triangle$－ stand appears to be $\pi g w$ which occurs in the Old
 （Annales du Service 16，196）and it is from this word， therefore，that it obtained the value $g$ ．

13．No． 320 （p．446）．\＆as is well known， is a later form of $\mathcal{L}$ ，its reading being assured by its employment in $s_{3}$＂back＂etc．，though naturally this does not mean that $s_{3}$ back＂was the real word of origin．Grd－ seloff has reminded me that many years ago Borchardt demonstrated that $L$ ，was a razor（ $Z . \ddot{A} . S ., 42,78-9$ ）．

Borchardt himself was unable to produce the Egyptian name of the razor，but Grdseloff points out that官，s3t（Lacav，Sarcophages，II，13）occurs as the name of a chisel or knife，and this is very possibly also the name of the razor or razor blade，from which the value of the later 解 could be derived．

14．A，No，172，and Additional Note 4 on p． 497. My remarks on the occurrence of at Edfu need some slight qualification．While I know of no exam－ ples of itself acting as imnt，that value is certainly borne occasionally＂by as in imnt＂west＂（IV，19，9）．

15．Group－writing pp．506－508．Grdseloff draws my attention to some interesting Middle Kingdom examples of groupwriting in spellings of Sarcophages，I，6），$\ell=$（Lacau，op．cit．，22），$\& \uparrow$－
 （Lacau，op．cit．，43－44）．The reader will appreciate that I lay no claim to have quoted all the examples of group－ writing that occur in the Old and Middle Kingdoms，but only sufficient to demonstrate its existence．

16．Appendix，p． 538 below．＇Itrwj：this name also occurs in the tomb of Ahmose at El Kab as 4x 品感 \＆ 4 角（L．D．，Text，IV，50，bottom left），showing that in the examples from the tomb of Paheri the scribe intended to write the word for＂father＂as the phonetic element $i t$ ．
h．W．Fatrman．

## APPENDIX

LE" SIGNE $\sim$ ET LE MOT $\ell_{x}^{\circ}$ "PERE".
Tout semble avoir été dit concernat l'interprétation matérielle et phonétique des signes hiéroglyphiques uniljttères dont se compose 1'"alphabet" de l'égyptien classique. Mais en fait, nombreux sont encore les problèment qui se rattachent à certains parmi eux, et les solutions proposées sont restées en partie discutables : tel est le cas surtout de l'hiéroglyphe représentant le serpent $n$.

De l'avis de la grande majorité des égyptologues, il s'agirait de la vipère à cornes (Cerastes cornutus Forsk.) qui a pour babitat principal l'Afrique du Nord. Ce serpent était fort bien connu des Anciens qui en donnaient la définition suivante: serpens, qui in capite cornua habet (Isid. orig. XII, 4, 18). Le médecin alexandrin de la fin du $\mathrm{II}^{\mathrm{e}}$ siècle de notre ère, Philumène ${ }^{1}$ ), dans son traité fameux sur les animaux venimeux, en donne une description détaillée : "La vipère à cornes, d'après les renseignements des iologues, atteint 45 cm ., et au maximum 90 cm . de longueur. Elle est couleur de sable et sa queue est mince. Sur la tête elle a deux excroissances que l'on peut comparer à des cornes, c'est pourquoi elle a été dénommée vipère à cornes. Sur le ventre, elle est munie de rangées d'écailles dont le frottement, en rampant sur le sable, produit un cliquetis; elle se déplace d'ailleurs latéralement et non point droit en avant'". D'après Élien(2), cette vipère, est très dangereuse et cause la mort des
${ }^{(1)}$ Philuareinos, XYIII. 1 (èd. Wellmann, CMG 1908, 10, 1, 1)
(9) Eures, Hist. An., XVI, 28.
hommes et des bêtes, à l'exception cependant des Psylles('). La science moderne n'a pu que confirmer l'exactitude des observations des Anciens: un excellent dessin de la vipère céraste exécuté par Desève figure à la pl. 40 de l'ouvrage du naturaliste C.S. Sonnini, Histoire Naturelle des Reptiles, Paris 1830, t. III (voir fig. 31).

pellatif féminin f.t comme nom Fig. 31.

[^54]Cette solution qui a été aujourd huí presqué universellement adoptée, repose cependant sur une fâcheuse méprise : la graphie $\underline{D} w-f . t$ du nom géographique en question we peut évidemment pas servir de base pour l'établissement de la lecture de son élément $x$, puisqu'elle appartient à cette période décadente de l'écriture hiéroglyphique où des noms géographiques du genre masculin; recevaient arbitrairement la désinence féminine $t$, purement graphique, en vue de former le groupe stréréotype $\stackrel{\circ}{\circ}$, servant alors de déterminatif à la plupart des noms géographiques( ${ }^{(1)}$.

A un moment donné, Griffith $\left({ }^{2}\right)$ défendait une thèse très différente, croyant reconnaître dans le signe n- une limace. Son principal argument était fondé sur un dessip de Prisse d'Avennes( ${ }^{3}$ ) reproduisant une peinture thébaine où l'on apercevait un reptile fort semblable au signe $x_{\sim}$, rampant le long de la tige d'un lotus. A vrai dire, ce vieux dessin incontrôlable, offre peu de garanties, et le reptile qui y figure peut être un vers quelconque autant qu'une limace.

Aujourd'hui, plusieurs autres considérations entrent encore en ligne contre cette identificaton avec la limace. D'abord; le nom du reptile est conservé en démotique sous la forme stmi \%. f3j.w $\left(=f_{j}\right)$ que Spiegelberg avait jadis commentée dans son Mythus vom Sonnenanauge ${ }^{4}$ ). Dans ce texte, il est dit d'un chat que "le souffle
(i) Cette corruption est due à l'hiératique qui a développé le groupe ${ }_{\otimes}^{0}$ rêinterprété en hỉéroglyphe par ${ }^{\circ}$
${ }^{(2)}$ Griftite, Hieroglyphs, p. 24.
(3) Newbrary, Beni Hasan III, p. 23.
(9) Sprraglerg, Mythus vom Sonnenauge, p. 135; cf. Gbiptith and Thoypsons The Demotic Masical Papyras of London and Leiden, vol. III, p. 33, no. 333: "fy subst. "cerastes" $24 / 27$ [V. 3/1]".
embrasé de sa gueule était une flamme comme chez le reptile $f i^{\prime \prime}(8,12)$. Déjà ce contexte contredit la thèse de Grifith, et pour la faire crouler entièrement, une fois pour toutes, il suffit de se référer à certaines formules magiques qui sont inscrites sur une statue prophylactique de Ramsès III trouvée récemment â Almaza('). Les formules III et IX y sont consacrées à la \& 易i
 l'on y parle à plusieurs reprises d'un "I mun " $f$ d'une coudée", c'est-à-dire de o m., 52 qui' serait aussi méchant qu’un serpent de 12 coudóes. C'est encore de son caractère redoutable que dérive l'usage assez répandu dans les Textes des Pyramides( ${ }^{( }$) et ailleurs( $($), d'écrire le signe $x_{\infty}$ coupé en deux parties $-\cdots$, pour le rendre en quelque sorte inoffensif, dans le domaine de la magie scripturale. Il s'agissait par conséquent d'un reptile venimeux. Enfin, d'après une observation de Borchardt( ${ }^{( }$) sur le cercueil d'Enôtès(5) ('In it.j) à Berlin, le reptile x y est reprósenté partout dans les inscriptions avec une langue fourchue.

Tout cela évidemment exclue l'identification avec l'inoffensive limace, et nous met sur la voie pour retrouver la lecture authentique du nom du serpent $\alpha_{\sim}$, la vipère à cornes. En fait, dans un passage des Textes des Pyramides qui appartient à la même famille de textes magiques pour la conjuration de serpents, mais d'une origine

[^55]beaucoup plus ancienne que le texte qui recouvre la nouvelle statue prophylactique d'Almaza, ce même reptile est mentionné en "scriptio plena" or on ens $w f j\left({ }^{1}\right)$. C'est de ce mot donc que dérive, en faisant abstraction des consonnes faibles, conformément au principe consonantal de $\mathrm{M}^{\mathrm{r}}$ Fairman, le phonogramme * $f$ de l'"alphabet" classique.

Les dóterminatifs ury de wfj dans les Textes des Pyramides et $\sim$ de sur la statue prophylactique représentant la vipère sans les cornes, ne constituent pas un obstacle pour notre identification qui est suffisamment étayée par là variante ${ }^{2}$, Il va sans dire, qu'il s'agit ici de déterminatifs génériques de serpents. D'ailleurs, à l'origine, d'après la paléogràphie archaïque de $\mathbf{M}^{r}$ Emery $\left({ }^{2}\right)$, le signe an est toujours figuré sans les cornes dans les inscriptions du début de la Première Dynastie. Plus tard, seulement, les Égyptiens ont adopté, pàr suite d'une observation plus précise, la forme habituelle m, où toutefois, les proportions des cornes du reptile ont été grandement exagérées; en nature elles sont à peine perceptibles. Mais encore sous l'Ancien Empire, sans parler des éṕoques plus récentes, on rencontre sporadiquement le signe mo sous la forme -. Il en est ainsi par exemple dans l'inscription de Nenki (IV ${ }^{\text {e }}$ dynastie) ; cf. Urk., I, $260: \mathrm{Om}^{\text {m }}$, 7- et $8^{\mathrm{km}}$ - . (1) Pyr. ${ }^{419 c \text {. - Un serpent du nom de "efa""est mentionné par les auteurs }}$
grecs et a été identifés avec 1" "Echis carinata S.shn.". Cf. Pauly-WissowA, grecs et a ette identifé avec I' "Echis carinata Schn". Cf. Paolyy-W
Real-Ercyolopädip, Bd, II A (1921), sub" voce "Schlange", p. 544 et suiv.
(') Walter B. Emrex, Hor Aha, Excavations at Saqqara 1937-1938, Cairo 1939, p. 91, no. 27.

A côté de la valeur primaire $f$ du phonogramme «．，il s＇est développée plus tard une valeur secondaire $t$ que nous pouvons attester plus d＇une fois． $\mathbf{M}^{\mathrm{r}}$ Fairman me communique à ce sujet un exemple tiré du Temple d＇Edfou（VI，112，5），dans le mot © © ，hftyw＇＂les ennemis＂，et un autre cas intéressant dans l＇Hypogée de Séti $l^{\text {er }}$ où le nom d＇un génie se lit： Hirj－w3rt＂le préposé au cordage＂（Lefébure，pl．XXIII ； cf．la variante $\rightleftharpoons$ ）．En rẻalité，cependant，ce phéno－ mène jusqu＇ici insoupçonné，remonte à une plus haute date， et l＇on peut citer des exemples tirés d＇inscriptions de la XVIII ${ }^{e}$ dynastie．Ainsi，tout au début de l＇Hymne au Soleil des architectes Souti et Hor，on lit en guise de titre ：
 quand il se lève en tant qu＇Harakhtès＂（1），où est évidemment une graphie particulière de la conjonction ＊hft＂quand＂．Puis，dans le nom propre masculin
 $1:-5$（ibid，pl．X，east side），nous retrouvons une formation en nisbé qui dérive du substantif $15-\infty$ 上上！ （Pyr．1693）＂la saison＂（pluriel du mot tr＂temps＂avec une vocalisation telle que＊ierréw）．Ce dernier exemple， surtout，nous paraît de très grande portée ：il tranche finalement le problème，si longtemps discuté，de l＇inter－ prétation phonétique du groupe 1 － Ye＂père＂，en $^{\circ}$ faveur des vues exprimées à ce sujet en dernier lieu par Eugène Dévaud（2），tout en nous montrant que la valeur
（1）Dernière réédition ：Alexandre Varille，L＇Hymne au Solell des Architecte Sourcet Hor，B IF A O，41，p． 25 ．L＇auteur ne semble pas avoir été frappé par le
caractere anormal de cette graphie de
＂（2）Eugène Devaud，Études et Notes，etc．，VII．－L＇État radical du mos
secondaire $t$ du signe oonstitue une dérivation cons－ onantale du mot fo it $(j)$＂père＂C＇est à Dévaud que reviendra，dès lors，le mérite d＇avoir montré pour la première fois，qu＇après tout peut－être，le signe x＿dans la graphie ordinaire 4 n＇aurait pas la valeur $f$ ，mais constituerait en fait l＇idéogramme d＇une vipère à cornes pour le concept de＂père＂，genre de personnification animale du chef de la famille，tout comme cette sorte de vautour ：mw．t，fut celle de la mère dans le système graphique de toutes les périodes de l＇antiquité égyptienne．

11 était toujours gênant d＇admettre l＇existence de deux vocables en égyptien pour le mot＂père＂${ }^{(1)}$ ，différ－ ant seulement par l＇adjonction d＇un $f$ final dans la forme plus récente，phénomène qui est sans parallèle dans cette langue，alors que le copte ne connaît qu＇un seul mot， ewort ：sout，où la persistance du $t$ montrait qu＇il se term－ inait en égyptien par une semi－voyelle et présentait，en d＇autres termes，le consonantisme itj．Ce résultat est
 ＂patron＂${ }^{(2)}$ ），＂souverain＂．

[^56]D＇autre part，les Égyptiens n＇ont pas manqué par différents moyens graphiques，de marquer ostensiblem－ ent le caractère symbolique de l＇idéogramme $n$ ，dég－ énéré en déterminatif．Dans l＇écriture très avare en déterminatifs des Textes des Pyramides，la graphie 40 est la seule courante；rares y sont les exemples pour la forme qui ne s＇introduit en force qu＇à partir des inscriptions civiles des mastabas de la $V^{e}$ dynastie．Sous le Moyen Empire，on crée alors la graphie conventionnelle
 compléments phonétiques et suivi du déterminatif gén－ érique．Cette forme devient stéréotype et se maintient depuis avec ses éléments graphiques quasi immuables， surtout par suite de la rigidité de l＇écriture hiératique． Cela n＇empêche que，souvent，les inscriptions hiérogly－ phiques，dans des graphies libres du mot，font clairement transparaître la nature symbolique de l＇idéogramme de la vịpère à cornes；tel est le fait surtout dans les cas suivants：
a）Au singulier，on écrit parfois le mot itj＂père＂ par le signe－mot $x_{n}$ ，sans compléments phonétiques：

1．Stèle d＇Aménophis III，de son temple funéraire derrière les Colosses de Memnon（L．，D．，IIl，pl．72，1．15）． Discours d＇Amon－Re－Kamêphis à Aménophis III： 1
 suis ton père qui créa tes charmes＂．

2．Texte de la Bataille de Qadech（éd．Kuentz， ＂Poême K＂，I．29）：Discours d＇Amon à Ramsès ：
 （1）M．Kuentz a copié le passage 0 武 $t$ dans ${ }^{\text {lo }}$ 是 $\longrightarrow$ ，mais si l＇on examine la photographie de ce passage du texte qu＇il reproduit à al pl．VII，on se rend comple，en raison de le direction de la cassure et de lespacz offert，que oette restitution est matereielemen mpossible．La lecture correcte est donnée dans l＇édition de Selim bey Hassan，i． 29.
suis près de toi，moi qui suis ton père，et ma main est avec toi＂．
b）Pour faire ressortir le signe－mot，on le fait suivre souvent d＇un trait vertical 1 ；les exemples pour ce phé－ nomène abondent，et il suffira de citer quelques graphies empruntées aux différentes époques：

1．Temple d＇Edfou（VIII，166，10）：运曻］

## FIEl｜＝＇A＂ll a fondé un monument à son

père Horus d＇Edfou，grand dieu，seigneur du ciel＇＂．
2． $0 \frac{x}{1}$（Rоснем．，Edfou，I，554）．
3．$x_{\hat{q}}$（Caire，20268；Moyen Emp．）．
4． Q $^{*}$（Louvre C 13；Moyen Emp．）．
c）En tant qu＇idéogramme symbolique，le signe peut se placer entre ses deux compléments phonétiques： of． $4^{*}-$ y $^{2}$ ．it $(j) . f$＂son père＂（Tb．Pap．Jouiya，éd． Naville，pl．12，I．21）．
d）Comme phénomène secondaire，rappelons aussi le transfert du signe－mot $x$ avec son phonétisme intrinsèque it dans un autre terme homophone：l＇exemple classique est le mot it＂orge＂，en copte сiшt，erort：ішт：

1． $4_{x}^{\circ}$ 鄁（Wh．，I，p．142；Basse Époque）．
2．Texte de la construction du temple de Dendérah （Johannes Dümichen，Baugeschichte des Denderatempels， pl．XXXII）：A propos d＇un champ，on rapporte qu＇il
 $\propto^{\infty}$ ：＂dans sa partie antérieure d＇orge，à l＇autre extrémité de froment et en son centre de fleurs＂．
e) Dans les formes du pluriel du mot $i t j$ "père", la vipère à cornes se révèle encore comme signe-mot par sa triple répétition:

1. 0 ( $\mathrm{i} t \mathrm{j}$ ) ityw "père des pères" (Edfou, 1I, 37, 9).
2. 40 "les pères" (Urk., IV, 554; Stèle de Kouban, I. 22).
3. $x=x$
"ses pères"
(Caire, 20164;
Moyen Emp.).
f) A titre de curiosité, citons encore pour le pluriel la forme $00_{1} 11$ (Edfou, VII, p. 3 et 11), qui est une variation de la graphie $x_{x}=$ miers signes sont remplacés par leurs phonogrammes correspondants.

Ainsi, force nous est de conclure que dans le mot
 mais un idéogramme symbolique. Dès lors, il n'y avait en égyptien qu'une seule vocable pour le mot "père", à savoir it ( $j$ ), dont le phonétisme s'apparente évidemment avec le même mot dans les langues syro-cananéenne et accadienne : ad, adda( ${ }^{1}$.
B. Grdselofe

SERVICE DES ANTIQUITÉS DE L'ÉGYPTE

## PTOLEMAIC NOTES

${ }^{\mathrm{By}} \mathrm{y}$
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## PTOLEMAIC NOTES.

In this and the subsequentarticles*I hope to give some notes on the reading of a number of Ptolemaic signs or groups of signs and on points of Ptolemaic lexicography and philology. In order to avoid needless repetition I shall refer to Rochemonteix and Chassinat's, Le Temple d'Edfou; Chassinat, Le Temple de Dendera, and Chassinat, Le Mammisi d'Edfou, as E., D., and Mam., respectively, quotation being by volume, page and line of the publication ${ }^{(1)}$.

The present notes have been discussed by letter with Professor A.M. Blackman to whom I sent a draft copy of the manuscript and to whom I owe many valuable comments and suggestions of which I have gladly availed myself.

## 1. N1,

The following are the chief spellings known to me of this epithet of Isis and Nephthys :

$$
\begin{aligned}
& \text { Ins (E. IV, 295, 14). } \\
& \text { Hull (E.I, 120, 8; not collated). } \\
& \text { N-in (E. IV, 289, 3). } \\
& \$ \text { (E.I, 376, 5; not collated). } \\
& \text { N- }- \text { (E. I, 433, 2) (2). } \\
& \text { U-, } 11 \text { (D. IV, 144, 10) }
\end{aligned}
$$

[^57]\IJ (E.I, 432, $11=$ XII, Pl. 347)(1); var,式】(E. I, 45, 2)(2).

N-I 1 (Rec. de Trav., 23, 165; Karnak, not
 p. 63, No. 68; (not collated); ไivis (D. IV, 113, 6),

V-0 ! (E. VII, 159, 1); var. औ-ny (De Morgan, op. cit., II, p. 162, No. 747)(3).

The Wörterbuch $\left.{ }^{( }\right)$, somewhat diffidently, has read this word as msntyw with a cross-reference to 'bt. While it might be possible to justify the latter, it is difficult to see how the former could have been obtained, and in fact both readings are wrong.

The key to the correct reading of this word is to be found, 1 think, in the writing of the place-name $\cdots$ (E. VI, 147, 13) idbw rhty( ${ }^{5}$ ), This reading, and that of the somewhat similar idbwy rhty, is assured by the spellings of these names that occur in numerous copies of chapters XIX and I of the Book of the Dead. Thus in Chapter XIX we find $1^{2} \leq 1 \neq 1$


[^58]whether $\rightleftharpoons$ or is the correct reading.
( ${ }^{2}$ ) Not collated: the determinative is suspect and $\sqrt{y}$ is to be expected.
($\left.{ }^{( }\right)$Not collated : the determinatives are suspect and may be f?
(() Wb. d.äg. Spr., II, 144.
(5) Cf. Gauthres, Dict. des noms géogr., I. 141 who, however, reads âbout ht Rekhti which is indefensible.
( ${ }^{()}$Budar, The Book of the Dead (1898), 79, 11-12.

$\left.10.00^{\circ}{ }^{4}\right)$ In Chapter I of the Book of the Dead is,



It is thus certain that a possible reading of is rhty and in fact an Edfu text gives us the writing H.ll (E.IV, 279, 2). Further-more, a study of the passages quoted below reveals that such forms as $\overbrace{\text { II }}$ IJ and Nos. 2, 3, 5, 6, 9 and 11 below). There can be no possible doubt that these are all writings of one and the same word and therefore the correct reading of $\ \pm$ y is Rhty "the Two Damsels".

The phonetic phenomenon revealed by these spellings is of no little interest. The old form of the word is Rhty, which already occurs in the Pyramid Texts ( ${ }^{9}$ ), That Ptolemaic could write this word either with a full
${ }^{(1)}$ Budar, The Papyrus of Ani, Pl. 13, D. 3.
${ }^{\left({ }^{2}\right)}$ Bodae, The Papyrus of Ani., P1, 13, E. 1.
PI. VI.
58008 , 24 . 40 and Pl. VIII $=$ LIERLEIN, op. cit.; PI. XLV, 21 ; cf. Lieblein, op. cit., Pl. LIV.
( $^{(5)}$ Gadthirr, Cercueils anthropoides des prêtres de Montou, 446, 17-18. In ad-
 the Late Period,.
${ }^{(9)}$ Gauthrib, op. cit., 65, 16 . 1898 ) 19,9 for other varr. cf. Shobtre Catalogue of Egyptian Religious Papyri in the British Museum, $1,25$.
() Gauthirr, op; cit. 57, 6.
() e.g. Pyr. 2200.
spelling as though it were to be read Rhty or with some phonogram that originally had that value is due to the faet that $h$ in the Upper Egyptian dialect had weakened to $h(0$ $=2$ ) and thus o could be used to represent that sound $\left({ }^{1}\right)$.

The examples already quoted above render it a relatively simple matter to arrive at an explanation of the
 these writings are due to a misinterpretation of the hier-
 atic form of $\boldsymbol{Z}$ a fact which is sufficiently clear from a study of typical hieratic forms of all periods (see Fig. 26) (2) : the original hieratic form of $\vec{Z} \vec{z}$ in the course of
time was interpreted as over a horizontal stroke

[^59]which was trapscribed either as - , or, quite unthinkingly, as $m \mathrm{~m}$. The plural strokes that accompany some spellings are only a late writing of the dual :

The following are the pripcipal uses of " Ity which I have noted ${ }^{1}$ ).
(a) The Rhty as makers of $\operatorname{cloth}\left({ }^{2}\right)$.
 10-11 = XII, Pl. 347) "Falcon, greatly feared, born of Isis, who arrays the god in the work of the Two Damsels".
 arrayed (thy) Majesty in the work of the Two Damsels".
(3) $\rightarrow \cdots$ 하 $\bar{T}=-\infty$ "
 raiment ( $m n \underset{h l}{ }$ ), my handiwork, excellently fashioned by (lit. "the excellent work of") the Two Damsels in order to deck thy statues with the White Eye of Horus'".
 IV, 144, 10) "It is the bright red cloth for glorifying the Powerful Ones with the "excellent work of the Two Damsels".
 IJ (E.VII, 260, 10-12) "May your bodies [be arrayed] in

[^60]clean raiment that is pure，and your persons be attired in shining apparel，the work of the Two Damsels＂．
 5－6）＂The great pure garment is clean for thy person being the work of the Two Damsels＂．
 ＂The red cloth（idmi）is for thy person，being，the work ${ }^{1}$ ）of the Two Damsels＇．
（b）The R＇hty as the nurses of Horus or the King．
 babe whom the Two Damsels brought up＂．
 11）（ ${ }^{3}$ ）＂Holy falcon standing on the srk，the stripling whom the Two－Damsels reared＂．cf．also De Morgan； Kom Ombos，II，p．208，No． 818.
（c）The Rhty as protectors．

（E．JV，295，14－15）＂I give thee the rpywt to protect thee the Two Damsels to guard thy body（4）＂．
（1） IV，289， 3 ：see further B．I．F．A．O．，43，114，n． 2
（ ${ }^{2}$ ）See above，p．545，n． 2.

${ }^{(3)}$ Not collated：$\left\{\right.$ is frequently used for 合 cf．，Miscellanea Gregoriana，$^{\text {a }}$ p． 419, n． 83 and see p． 413, n． 37,1 is probably to be corrected $\$$ ．［Aiready $\begin{gathered}\text { corrected］．}\end{gathered}$ （＇）A more literal translation wiould be＂I give thee the rpywt protecting thee， the Pwo Damsels guarding thy body＂．The present translation is due to a suggestion it would be permissible sometimes to translate $h r+$ infinitive after $r d_{i}^{\prime}$ by＂to do so
and
 245，16－17）＂The Two Sisters are united in protecting thee while the Two Damsels guard thy body＂．Cf．E．I，45， $4 ; 384,8$ ．

$$
\text { II. } \square 0, \Rightarrow 0
$$

Although this name of the uræus occurs not infr－ equently，I have been unable to find it in the Wörterbuch． The chief variants noted are $\left({ }^{( }\right)$：

コーG（E．V，70，14；D．I，79，3；11，19，5；11I， 165,13 ）．

> جG (E. VII, 43, 16)

$$
r_{-} \text {(E. Vl. 285, 11). }
$$

$x$（E．V，36，13）

CG（E．VII，191，3）！
C•G－（E．VI，307，3）．
C－G（Mam．，84，16．E．1II，104，4；IV，52，12； 70，8；V，137，12；VII，133，4；197，4；D．IV，270，10）．

$$
\Rightarrow \quad \mathrm{E} G \quad \text { (E. III. 172, 11. 17). }
$$

コーも（E．III，15，2；113，8；IV，162，4；372， 1；D．II，74，17；109，6；191，8；III，106，6；IV，201，14）．
（1）There are minor and unimportant variations in the grouping of signs and in
the exact direction of the exact direction of $\lambda$ ． －

There is also a dual form C. (Mam., 69, 16), cf. $C_{-}^{\prime \prime} b^{\prime \prime}$ (E. V, 37, 16) and (E. VI, 186, 16).

The difficulty in establishing the true reading of $\rightarrow h$ is that of reconciling the simple forms such as $-G$ and those which employ $\square$ or $\ldots$ with any of the known values of $\beth$, e.g., $p s a^{\natural}, p h 3, d n i$ or, less likely, mn. At first sight the writings with $\square$ and .do not accord with any of these values. Nevertheless, it seems certain that the correct reading must be found in either pss or phs because of the spelling $\rightleftharpoons$ which occurs in
士 " (F, JV, 254, 12-13) "The White Crown comes to the place wherein is the Red Crown, [they] are united as one and the Sundered One is merged with her fellow'.

This conclusion is reinforced by the pun on the Old Perfective $\times \underbrace{x} p(s) s t i$ and $C G$ in

 with the Kindly One ( 3 ht), I join my Sister, I am at peace in the company of my fellows we cease being divided as two Sundered Ones and we unite as the Double Diadem upon thy head". Cf. two further very close parallels in E. VI, 186, 16-17; Mam., 69, 15-16.

Hitherto my personal inclination has been to read Phat "The Sundered One". Although the two examples
just quoted may create a bias in favour of $P(s) s t$, I have found it difficult to suggest this reading because I could not explain the occurrence of $\quad$ and $-\infty$. At the same time, the variants $コ$ ? and $\because G G$ would appear to indicate that we are not dealing with a compound word. But if Phst be the correct reading, we still have to explain $\square$ and --. I have no confidence in the suggestion that $\square$ and - , normally ${ }^{\circ}$, are here equivalent to X under the influence of the preceding $\bullet_{\left({ }^{1}\right) \text {, although }}$ I am able to quote one example or a similar phenomenon in $\mathbb{U}^{8} \rightleftharpoons(\mathrm{~B}$ (III, 316, 16) for bsh "phallus". The only suggestion that has occurred to me is that in writing
 $p h 3$; a fruit drink that often occurs in the offering texts. $\square$ might therefore have been written as a kind of phonetric determinative and some scribes may have misunderstood its true function and substituted its alphabetic equivalent $\ldots$ in much the same way as ${ }_{\square}^{\infty}$ (E. III, 119, 5) is sometimes written for $\bigcirc$ rdi. The objection to this suggestion is that $\square$ and only occur in the word under discussion and are not found in other examples of phs.

I have, however, recently received some interesting comments from Professor Blackman who writes: "I have thought for a long while that $\beth \rightarrow G$ etc. is probably $P(s) s t-c$ 'Sbe who was sundered as to place' $=$ Sundered from (her) place' and I presumed that we had

[^61]a reference here to the time when Egypt was separated into two kingdoms or to the $\mathfrak{u}^{1}$ quitous legend of the straying eye of the sky-god. I favoured the former idea. If $P h_{3 t}$ is to be read, car the $\square$ be due to its occurrence in a writing of the name of the goddess $P_{s}$ hit (Newberry, Beni Hasan, I, 18)? A lion-goddess so easily becomes a uræus-goddess because of Tphēnis. Then perhaps after all we have to read $P(3) k t$, rememberipg that $h$ at this time often was pronounced $\frac{5}{4}$, so there was a pun in No. 2 (quoted above) on the goddess' name and the verb $p(s) \check{s}$. In any case, it is quite likely that $P(3)$ ht and Phast were by this time identical in sound: *pashe. Certainly

7 may account for $o$ and a scribe might easily substitute - for it. This is a possible explanation(1). Then $\underset{\sim}{7}$ G could be the goddess Psht. But I feel very uncertain still and wonder if Psst- is not the reading with $\square$ occasionally dropped, and I still favour this'?.

These are interesting suggestions which are not lightly to be disregarded, but I am bound to contess that I am not yet absolutely convinced that either Pssst-c or Pssit are the correct reading. In the first place, I doubt the existence of two forms, a full form Pssitc and a short form Psst obtained by the dropping of $\ldots$, and such a writing as OG seems more likely to be an indication that
(1) Note however that if Professor Blackman's suggestion be correct that a originated in , it is obvious that the Ptolemaic scribes must have misunderstood the real nature of the sign and the function of $\square$ which itself replaces an original shrine on which the lioness was lying; of. the figures of Anubis気, 各
the entire reading is contained in D. If this be so, I know of no way of explaining the presence of $\square$ or - in a writing of $p s$ s.t. A second point is that there is no real proof that $\square$ in ? ? really read, although it is obvious that some scribes did equate $\square$ with - , but there is no proof that this equation is anything more than a false analogy. If we read Psit-c; then I think we must expect to find that $\mathcal{G}$ is the oldest form and it would be natural to find that it is also the most common form. It is difficult to give precise dates to the examples that we possess : of the 9 examples of $\beth \backsim G$ known to me, 5 are from Dendera and are later than the Edfu examples, but of the 19 instances of $\exists \mathrm{b}$ only 2 are from Dendera. There are 5 examples of $D$ or $\vec{I}-G$ and of these 3 are from Dendera and all the Edfu and Dendera examples are later than the earliest examples of either $\exists \cdot G$ or $\sqsupset G$, which, however, are roughly contemporary.

These observations seem to indicate that $\exists \bullet G$ is likely to be the earlier form : although this cannot be stated as a proven fact, it is probable, and it js certain that at Edfu, whose texts are in the main earlier than those at Dendera, 7 Gh is by far the most common form. I doubt, therefore, whether the evidence at present available supports the reading Psst-c.

The question of the reading cannot yet be regarded as settled, but I am still inclined to favour either $P(3)$ ht or Phst, the most likely explanation of $\square$ being Professor Blackman's . If there had been any full spellings
of a similar word Phat, it would have been easv to settle the problem, but with the exception of E. IV, 254, 13 (quoted No. 1.above), which unfortunately is not decisive, I do not know of any certain examples, but attention may be drawn to a few somewhat similar names. In a text at Edfu
 16-17) "Thê grear sundered One for terror of whom men flee". Here the Wörterbuch $\left(\frac{1}{1}\right)$ is inclined to see a writing of the name of Pakht of Speos Artemidos. A somewhat similar name occurs twice in the Bremner-Rhind

 - A ${ }^{-1}$ "Pekhat has put him in her fire" and again in another passage "fire is on all thy ways", $-1=-0$ 11.1 , Pakht has condemned thee, her flame is the great flame, lady of terror, mistress of fire, and she takes away thy flesh, she condemns thy soul, her flame has burnt thee up.' ${ }^{(5)}$ ) Until further and more precise information is forthcoming it would be unwise definitely to equate any or all of these with $? ?_{n}$.
$7-G$ is primarily a name of the uræus:
(a) In a wide and general sense.
(1) $^{1}$ Wb. d. äg. Spr., 1, 498.
(1) I owe these two references to Mr, Grdseloff.
${ }^{(2)}$ Pap. Bremner-Rhind 27, $19=$ Faulkner, Bibliotheca Aegyptiaca, $\mathrm{m}, 64,7$ (c) J.E.A., 23, 183.
(3) Pap. Bremner-Rhind 30 , $25=$ FLDLENER, Bibliotheca Aegyptiaca, 1II, 81, 1-3'.
 F protecting thee, the Sundered One consorts with her fellow and we emit our fiery breath against thy foes".
 307, 3) "Thy Kindly Snake and thy Sundered One are lifted up to thee, they, that is their hands, offer thee protection."
(5) $\overrightarrow{\text { ( }} \rightarrow$ (D. IV, 270, 10̣) "Take to thee the Sundered One that she may appear gloriously on thy fore-head, and the Great One that she may shine forth up on thy brow." (addressed by Edjō to Hathor ; here Edjo offers her own self to Hathor).

(D. II,

109, 6) "Take to thee (Hathor, cf. Nos. 18-21 below) the Sundered One, the first of the forbears, that she may seat herself between thy eyebrows."
 $116,2)$ "How very terrifying he is, how very majestic he is, like Atum, the Sundered One being on his head."
(b) Frequently identified with Edjō, who is
 Sunderd One, the left eye of the Winged Orb ('py)."
${ }^{(1)}$ Cf. Annales du Service, 43, 227, No. 186 (b) [=ici p. 420]•
（9）コーG：：N－7（D，IV．201，14）＂Sundered One on the head of the Horizon God＂．
（10）：© TM of the Lady of $F^{c} g$（Nekhbet），born of the Sundered One （ $=\mathrm{Edjō}$ ）＂．
 372，1）＂Edjō，Mistress of Pe and Dep，Queen of Lower Egypt，the Sundered One of the King of Lower Egypt＂．
＂Lower Egyptian Sorceress，Red Crown，the Sundered One of the King of Lower Egypt＂．

（Mam．，84，
$15=$ E．$V, 70,8)$＂Sorceress of Pe，Edjo，the Sundered One of the King of Lower Egypt＂．（1）
以色罪三なo 3－4）＂he who shines in the heavens，his two urxi protect－ ing him gleaming in the sky，rising as $D m 3 t-p d w t$ ，setting in the west as the Sundered One＂．

There are also a number of examples in which the identification with Edjö，though possible，is not as certain as in those just quoted：

E．III，172，11）＂Offspring of Edjo，nursling of the Lady

[^62]of $F^{c} g$ ，who unites the Sundered One with her fellow＇． Cf．E．V，70，14－15．
（16）The King＂is on his throne as sovereign in Pr－wr
 18－192，1）uniting with the Sundered One，joining with Hrit－tp，and placing the Right Eye beside the Left Eye＂． Cf．the very close parallel E．III，172，17－18，and also E．IV，246， 2 quoted below No． 23.
（c）Identified with Nekhbet（rare，but cf．also E．IV， 254，12－13，quoted above No．1）．

12）＂Upper Egyptian Sorceress，Queen of Upper Egypt the Sundered One of the King of Upper Egypt＂。
（d）Identified with Hathor（as urcus）．

（E．VII，133，4－5）＂She is the Eye of Atum who illumines the Two Lands with her rays，Sundered One of Drty the lord of the Drtyw＇．
 Sundered One in＇Land of－Atum＇（Dendera）＂．

79，3）＂Great Sundered One who is upon the bead of all the gods＂．（Phist wrt hri（ $t$ ）tp n ntrwnbw）．
（21） $\mathrm{T}_{0}^{\times-\infty}$（D．III，185，4）＂Great Sun－ dered One on the head of her father＂．
(e) As a crown (?). This use is rare and by no means certain: in the following example Phat may once again be the uræus (but cf. No. 1 above).
 wears the Upper Egyptian Crown ( $s m^{*}-s$ ) together with the Lower Egyptian Crown ( $m h w-s$ ) and joins the Sundered One to her fellow".

Finally, it is of interest to record that occasionally $N-N-G$ occur as variants of $\vec{\nabla} \bullet$ :

 "on his throne as the Two Mistresses on the Throne of Horus uniting with the Sundered One, joining with Hrit-tp, and placing the Right Eye beside the Left Eye". (cf. No. 16 above).

(E. IV, 145, 15-16) "The Sundered One is joined to her fellow and I establish them upon thy head as ruler of the Two Halves"'

I think there can be little doubt that here we must also read $p h_{3 t}$, the substitution of $\Lambda$ for $\sqsupset$ being due to the well-known confusion between the two signs which produced such writings as (Metternich Stela, 170) for $C_{e=1}$ (E. I, 101, 8) dyt (dwyt, dniwt) "cry, noise".

## - III.

In an interesting passage in the Bremner-Rhind Papy:


[^63]
 translated "and the names of "Apep and of all the enemies of Pharaoh, dead' or alive, are to be written in pigment (?) on the ground and trampled with thy foot in the correct manner." In a note, Faulkner remarked that the reading of - was uncertain $\left({ }^{2}\right)$. For this I myself was largely to blame, for in discussing this passage with him I overlooked the fact that long ago Piehl established that is *e and certain other words is to be read $\dot{s} \varepsilon\left({ }^{3}\right)$, and I similarly failed to realise the correct reading when discussing ${ }_{e}$ (E. VI, 109, 7)( ${ }^{4}$ ). $\approx$ therefore is to be read ${ }_{s} 3 w$.

Faulkner's suggested translation of e m, however, is less certain, for "pigment", unless it be imagined as being in the dry form, is hardly a suitable medium for writing on the ground. In a text at Edfu, however, mention is made of ${ }^{\circ} \mathrm{e}$ Here it is clear that $s 3 w . n w$ wid must designate something capable of being used to seal a temple, hence presumably something that can be moistened to make a "paste", which Professor Blackman and I consider to be the best translation of $\dot{s} s w w w\} d$. This paste may well have been of "clay" or "soil" since Papyrus-BremnerRhind tells us that e was something on the ground, and "soil" accords well with the normal uses of De which are listed below. Thus in E. VI, 203, 3 we may

[^64]translate "paste for making the sealing of thy temple", and in Bremner-Rhind the scribe would "write" (i.e. scratch or trace with his finger or a suitable instrument) the names of "Apep "in the dust on the ground" before rubbing them out with his foot ${ }^{1}$ ).

The two examples just quoted are not typical of $\$$, which in late texts occurs in a number of sterotyped phrases with the general meaning of "soil" (usually translated "domain)". There are no really important differences in spelling, but for the sake of completion 1 give a list of those that have come to my notice.

- (E.I, 575, 18( ${ }^{2}$ ) ; III, 127, 6; IV, 217, 8; 280, 13; 390, 7; VII, 193, 5; VIII, 76, 11; 84, 9).
s- (E.I, 162, $3=\mathrm{XI}, \mathrm{Pl}, 270\left(^{3}\right) ; 499,8=\mathrm{Xll}$, Pl. 362).
© $\mathrm{C}[\square$ (E.I, 385, $1=$ XII, Pl. 330; Drioton, Fouilles de Médamoud (1925): Les Inscriptions, p. 53, No. 121, 2; Rec. de Trav., 23, 167).
* C ( ${ }^{4}$ ) (D. 1I, 191, 12; IV, 87, 6).
$\left.\cdots{ }^{4}{ }^{4}\right)\left(\right.$ E.I. 483, 12)( ${ }^{2}$ ).
* e (E. I. 69, $4=$ XI, Pl. 237).
*) 1 (D. I, 82, 3).
 tion with ${ }^{2} 3 w$. I am unable to say.
${ }^{(2)}$ Not collated.
${ }^{(3)}$ The determinative is small and carelessly cut and looks rather like $\square$ but is probably only a badly made .
() ${ }^{(1)}$ in reality is only a small $=$.
\$e occurs in the following expressions :


P $\uparrow \times 2$ (E. IV, 217, 8-9) "I give thee Štst to stab him who would violate thy inviolable soil (s sw. $k \dot{s} \dot{s}^{2}$ ) and to increase the terror of thee".
 IV, 280, 12-13) "Thy knife cuts off the stones of him who violates thy soil" ${ }^{(1)}$.
(3) 置 e ( who violate thy soil shall no longer exist".
 "Never shall there be ingress for him who would violate
 284, 13). This appears to be a new use of $\rightarrow$ rsi.
 de Trar., 23, 167.


"Thou art preeminent in the temples of Egypt, the gods of the Two Outpourings bearing thee allegiance".

[^65]
(E. VII, 193, 5) "one fully initiated, single-minded and loyal.', ${ }^{1}$ )
(7) of him who is loyal".
 rently little more than "be disloyal": ff . s,
 "He who deserts thee does not exist".
 $\cdots$ "C XII, Pl. 362) "I have given thee thy foes fallen in the shambles and thy enemies destined for the god's slaughterblock, those who desert tlsee having been asssigned to thy knife, their confederates being utterly destroyed (lit. in great slaughter)".
(10) who desert's thee in my noose".

[^66]Other examples of $h_{3}{ }^{5} z_{3 w}$ E.I, 69, $4=$ XI, PI. 237; 162, $3=$ XI, Pl. 270: 483, 12-13.
 desert the soil", clearly merely a synonym of $s m \mathrm{hr} i s w$.
(11) $\triangle f=1 \mathrm{~A}$ • - (D. IV, $87,6=\mathrm{D} . \mathrm{II}$, 191, 12) "Who gives life to him who is loyal to her".

"Who takes care of (irt shrw) him who is loyal to her".
h.W. Fairman.


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[^0]:    1. The items marked with* are republished in this "cahier,"
    2. The title is mentioned afterwards, see p. 373.
    3. BIFAOC. XLIII, p. 5 .
[^1]:    1. BIFAOC, XLIII, p. 137.
    2. itid. p. 130.
    3. ibid. p. 135.
    4. See e. g. pp. $329,348,393$ ( $16 / \mathrm{d}$ ), 415 (No.160), 430 (Nos. 237, 239e).
    5. BIFAOC. XLIII p. 132.
[^2]:    1. BIFAOC, XLIII, pp. 132
    2. For his necrology see. The Times, November 24, 1982; The University of Liverpool, Recorder, No. 91, January 1983, p. 72-77; JEA, 70, p. 123-127 port. - London, 1934. Also the tribute delivered at a thanksgiving Service at Elm Hall Drive Methodist Church, Liverpool, Wedneslay 5th January, 1983
[^3]:    (1) Rochentorten-Chassivat, Le Temple dedfou, I, Chassinat. Le Temple dedfou, II-VIII (text), IX-XIV (plates) and Chassinat, Le Mummisi id Edfou. In order to avoid wearisome repetition in this paper, the quotations from these
    volumes omit the full title and give volume, page and line only (thus $\mathrm{V}, 10,2$ is vol. VI, page 10, second line on the page). Quotations from the Mammisi are also by page and line. with the Drefix Mam. [Appeared in 1985 Vol. XV by S. Cauville and D. Devauchelle, Both authors revised Vol. 1 and re-edited in two parts in 1984. Other revised volumes will follow].

[^4]:    (1) V, 4, 5. - (2) See YIII, Avant-propos, pp. v-xi

[^5]:    () I retain the term "alphabetic", though strictly speaking the Egyptian "aal habat"' was not truly alphabetic; cf.'Edgerton, Egyptian Phonetic Writing, from its. Invention to the Close of the Nineteenth Dynasty in Journal of the American (2) Junker, Grammatik
    (3) Thaner, Grammatik der Denderatexte §§ 4-47.
    (8) The following discussion is not intended to offer a complete or firal statement
    on the problems of transliteration. Its sole purcose is to give a general indicaticn priciples upon which are based the transliterations given in this paper.

[^6]:    ( ${ }^{1}$ ) Göttinger Gelehrte Anzeiger, 1908, pp. 120, 121.
    ${ }^{(2)}$ This does not mean that it was entirely dead to the priests. On the contrary, I am convinced that they knew exactly what they were doing and that they had access to sources of vocabulary, texts and grammar that are now lost to us. I have the impression also that al least some of the texts must have been recited, particuland certain other passages, though doubless the meang of the words may have been lost to the ordinary listener,

[^7]:    (1) The ideal course would be to employ different types of brackets according to whether a sign has been omitted or is superfluous, but this would make our transli terations so complicated and cumbrous that in the interests of simplicity it seems bette to employ only rounded brackets ( $)$. Square brackets $[$ in $]$ will be emp-
    loyed according to the usual convention whenever signs, originally written by the scribe, have become damaged or are now lost.
    (2) $^{(2)} 11 \mathrm{I}, 123,10$.
    (3) IV, 166, 14.

[^8]:    ${ }^{(1)} \mathrm{Y}, 125,1$.
    （）Or alternatively $i w_{r}$（itr），which in some respects is preferable．
    $\left.{ }^{( }\right) \mathrm{V}, 124,3$.
     1，147）．
    （b）IV，19，6．Here by dropping has become the phonogram Wh and the 3 which is not spelled out is indicated in transliteration by the brackets but see Note IV，also．
    （ $)$ IV， $13,2$.

[^9]:    （1）III，28， 7.
    ${ }^{(2)} \mathrm{V}, 31,2$.
    （8）VII，174， 15.
    （）In such cases is to be explained as the mechanical reproduction of the old historical writings and is probably devoid of any phonetic significance，except perhaps in some cases as an indication of a final weak sound（cf．Note LXXVII）．

[^10]:    （1）Chassinat，Catalogue des Signes hiéroglyphiques de l＇Imprimerie de Institut frangais du Caire，Le Caire 1907，and Supplemient général au Catalogue des Signes hiéroglyphiques，Le Caire 1930．See also the Signs non－catalogués （casseaux 1－42）of which Nos． $1 b-1440 b$ approximately are listed in the Supple－ ment général． $1440 b-2240 b$ approximately are mainly Edfu forms，the remaineder （2241b approximately－2663b）being in the main Dendera forms．［A now com；lete cition appeared in 1983］．
    ${ }^{\left({ }^{2}\right)}$ ．Compare the words quoted in Mam，Avant－propos，pp．xii，xiii，xvi，Notes 4－7，with the forms used when they were first printed．

[^11]:    ${ }^{(1)}$ Sethe, Der Ursprung des Alphabets in Nachrichten von der Kgl. Gesellschaft der Wissenschaften zu Görtingen, 1916, Heft, 2 , pp. 88-161, and especially pp. 119-124, 151-7. Cf. also Yeivin, The Sign and the true nature of the early alphabets in Archiv Orientalni, 4 (1932), $71-8$.

[^12]:    ${ }^{(1)}$ This origin is common to all the figures of men，women and deities（except者 aid its variants）used to represent the suffix pronouns and therefore is not repeated in full in the signs that follow．

[^13]:    ${ }^{(1)}$ The upper part of the sign is destroyed in the original，but there can be little doubt that this form was intended．

[^14]:    ${ }^{\left({ }^{1}\right)}$ The correct form does not exist in the fount. In the original, Horus is wearing the 筧'"crown above the horns."

[^15]:    (1) Although Chassinat does not use this form at Edfu, it is probably to be

[^16]:    （l）Newberry，Beni Hasan，1，p．37，Cf．Newberry，op．cit．，I，Pl． 30 ；II，PI． 7 for variant spetlings．

[^17]:    （ ${ }^{1}$ ）is not the exact form，the original showing straight lines，

[^18]:    ${ }^{\left({ }^{1}\right)}$ Or perhaps simply $p s$ ，a word of the same meaning，cf．Wb．d．ag．Spro 1، 549， 553.

[^19]:    ${ }^{(1)}$ Drioton has produced further evidence in support of this view in his deci－ pherment of the cryptogram of Khaemhet，Revue d＇Eg＇gyptologie， 1 （1933），5．Cf． $\mathrm{G}_{\text {abdiner }}$ and Gaurhier－Laurent，Supplement to Gardiner＇s Egyptian Grammar，20．

[^20]:    ${ }^{\left({ }^{1}\right)}$ This is not confined to the Ptolemaic Period alone ：cf．Detadd，Sur la substitution d＇un $\mid$ secondaire à un $\quad$ primaire in $S_{p h i n x, ~ 12, ~ 107-110 ; ~ 13, ~}^{\text {，}}$ 153－162．
    －（2）Cf．Černy in Annales du Service，41，335－6；Sethe in $Z \ddot{A} S$ ．，47，164．A fur－ ther example of the change of into $\infty$ after 8 is ．to be found in a crypto－ gram of the Eighteenth Dynasty in which $6 \boldsymbol{\sigma} \delta$ is twice written for the preposition Q（Drioton，Essai sur la Cryptographie Privée in Revue d＇Égyptologie，I（1933），7， Nos．A．99，101）．Drioton＇s explanation（op．cit．，42，No．87）that 666 is equivalent to 8 by acrophony from 8 ？ee $h^{2} w$ is clearly wrong and misses the point of the writing．
    （9）In this connection the writing
    13 $=3$
    （III，154，5）for 3h＇＂inscribe＂is interesting．

[^21]:    (1) I owe this reference to Mr. Grdseloff.
    (2) Pyr. 1096b; cf. Grdsilofr in Annales du Service, 40, 196. For the identi-
     ${ }_{6-7 \text { ). }}^{\text {148. }}$. Ptolemaic texts also refer to the four faces of Hathor (cf. $1 \mathrm{~V}, 73,1$; Y1, 262 。 6-7).
    (') CX. VIII, 64, 2 and often.

[^22]:    ${ }^{(1)}$ Newberey, Beni Hasan, II, Pl, 7.

[^23]:    ${ }^{(1)}$ The most recent discussion of the Five of Hermopolis is to be found in Sethe, Amun und die Acht Urgötter von Hermopolis, $\S \S 73-6$.
    $\left.{ }^{(2}\right)$ Boylan, Thoth, 148, 151.
    (') Mariette, Denderah, I, 55 b . For further references to the five gods who came forth from the Nun or in Hermopolis cf. Brugsch, Reise nach der grossen Oase el Khargeh, 15, 7, and Pap. Mag. Harris 3,5, both of which are quoted by Sethe, op.
    (4) Much the same idea occurs in Mm , 些
     $247,13)$. The reference to the five sepals can only be connected with the Five Gods
    for the lotus does not have five sepals. Dr.L. Keimer informs me that the white lotus (Nymphaea lotus L.) has four sepals. Drad from, 16 to 20 petals (cf. Description de 'Ezgypte (2nd. ed. 1824), X1x. Hist. nat. Botani, Hue. Flore d'Egypte text pp. $415-422$ and P1. 6U, fig. 1), ana the blue oltus (Nymppaea caerulea Sav.) has four sepalis
    and from 12 to 14 petals (Descr., XIX text, five sepals is therefore clearly, XIX, text, pp.422-5, and P1. 60 , fig. 2). The mention of five sepals is therefore clearly a mythological allusion.

[^24]:    (') Kegs, Lu den neuen Zoser-Reliefs aus Sakkara in Nachrichten der Gesells haft der Wissznschaften au Götingen, Phil.-Hist. Klasse, 1929, 57-64, especially 61-4 (2) Pètrie, Royal Tombs. I, P1, 12, $1=17,26$.
    (9) Fifth-Quibell, The Step Pyramid, P!. 16=P1. Il accompanying Firth's report Excavations at Sakkura in Annales du Service, 28, 81-8.

[^25]:    ( ${ }^{(1)}$ Leflebver, Petosiris II, 46 (Inscr. 71 b).
    ${ }^{(2)}$ Piangoft, Le Livre du Jour et de la Nuit, 89.

[^26]:    (i) Cf. Grarow in ZAS., 72, 27, and Drioton, L'Écriture enigmatique in Piankoff op. cit., 85 , and $110, \S 13$.
    ${ }^{(2)}$ Cf., however 4 im, a word of uncertain meaning of which can only quote one example (Lepsius, Das Todtenbuch der Aegypter, 165, 7).

[^27]:    (1) Sithe, Kurznamen auf $j$ in $Z A B S ., 57,77$. Further examples quoted in Sethe, Noch einmal zu den Kurzinamen auf $f(Z \ddot{A} S$., 59. 71) and Jonger, Die Stele deg Hofarztes 'Irj $(Z A \hat{A} S ., 63,57$ ff.). I am grateful to Mr. Grdseloff for drawing my attention to the connection of these with problem under discussion and for giving me the examples quoted $i_{\Omega}$ the next two notes.

[^28]:    ( $\left.{ }^{( }\right)$, Blachman, Meir, IV. PI. 15.
    (2) De Morgan, Dahchour (1894-5), p. 13
    (J) Serfe, Dar Ursprung des Alphabets, 117

[^29]:    ${ }^{(1)}$ Ansales d: Service, $41,130(=$ p. 240 in this edition) note, and in Piankoff, Le Livre du Jour et de la Nuit, 105.
    (3) Cf. Carnarvon Tablet No. 1, line $3=$ JEA., 3, Pl. 13. See also Gardiner's in PSBA.; 36 (1914), 73.
    (3) A particularly instructive text is Cairo J.E. 46341 (see Annales du Service it is fre-fuently quite imposisible to distinguish the two signsfrom each other.

[^30]:    (l) The difficulty of distinguishing, from e on the original frequently led older copyists into error, Thus, to quote only one example, von Bergmann in his Hier- .
     235, 6) imi sgtwt, an epithet of Horus (ef. Kees in ZAS., 64, 107-112). Examples of this understandable type of error could easily be multiplied.

[^31]:    (1) But $T$ is sometimes the ideogram bnw, e.g. $\square$ (VIII, 145,

[^32]:    (1) Drioton, L'ÉEriture énigmatique in Piankoff, Le Livre du Jour et de la Nuit, 105, \& 12.

[^33]:    (4) Sethe, Die Neuentdeckte Sinai-Schrift und die Entstehung der semitischen Schrift, in Nachr. Kgl. Ges. der Wiss. zu Güttingen. Phil. Hist. Klasse, 1917, p. 473.

[^34]:    ${ }^{(1)}$ Cf．Junker，Schriftsystem，7，and Drịoton in Annales du Service，41， 116. $=$ p． 222 here．See also Annales du Service， $40,333=$ p． $80-81$ in this edition

[^35]:    （1）zäs．，30，113－119．

[^36]:    (1) In Piankoff, Le Livre du Jour et de la Nuit, 105, note 2. ( ${ }^{2}$ ) JEA.,21,

[^37]:    (i) The context shows that the translation "on which the god shines" is not
    possible. possible.

[^38]:    （1）Cf．Gardiner，Grammar，p．494，Sign List S． 28.
    $\left.{ }^{( }{ }^{9}\right) \cdots-{ }^{-1}$
    example，can hardly be considered as a likely source of the value $s$ ．
    ${ }^{(3)}$ Cf．Edgerton in Journal of the American Oriental Saciety，60，484， 485.

[^39]:    （1）The conception of Egypt as the inviolable，sealed fortress（cf．III，188， 13）is one of the results of the strong Egyptian nationalistic reaction to foreign and abjve all Persian conquest．There is considerable evidence of this nationalism in The texts at Edfu．For Egyptian nationalism at this period see Drioton，Le Nationa－ hisme aly，emps des Pharaons in Revue du Caire，No． 52 （Mars 1943），427－438，especially 434－438，Guentch－Oglueff，Noms propres imprécatoires in BIFAO．，40，117－133； Kees，Kultlegende und Urgeschichte in Nachr．Ges．dẹr Wiss．zu Gọttingen．Phil Hist．Klasse，1930， 346 ff ．
    （2）Read $n^{c} S^{\circ}$ e．This is better than nsd which does not have the

[^40]:     1860), III PI. IX. No. IX.

[^41]:    （1）Cf．Strirndospr，Koptische Grammatik， 167 ；Crous，Coptic Dictionary 230．For Late Egyptian examples see Wolf＇s remarkş in $Z \ddot{A} S ., 69,108$.

[^42]:    () have been using this term in my private work for some time past, under the influence of Drioton's "acrophonic consonantique" (Annales du Service, 40, 397) [ = ici, p. 170] which is a less adequate and accurate designation. As far as I am aw. are Drioton himself is the first to have used the term "consonantal principle"' in print and in his most recent study (cf. Annales du Service, 41, 128-132) [ ici, p 233-2421, he employs "principe without, however defiaing or explaining the former term.

[^43]:    (1) Only 11 (No. $314 . c$ ) for $w$. (2) Only fo (No. 135) for $b$.

[^44]:    From an unpublished cylinder seal of the Third Dynasty in the possession
    of Mr．G．Michaelides of Cairo．I am grateful to Mr．Grdseloff for giving me ${ }^{(2}$ isple and for allowing me to quote it．
    ${ }^{\left({ }^{2}\right)}$ Pyr． $645 c(\mathrm{~T})$ ．
    ${ }^{\left({ }^{3}\right)}$ Pyr． 85 c（W）．
    （4）Pyr． 85 c （N）．
    ${ }^{(5)}$ Pyr． 798 b（N）．
    ${ }^{(6)}$ ）Pyr． 798 b（P；M）．

[^45]:    (1) Cf. Jonama, Sehriftsystem, 12-15, whose arguments apply with equal force
    Edfu. to Edfu.

[^46]:    () It is clear that all these reasons do not apply to the texts of the New Kingdom. In the New Kingdom I imagine that (b) and (c) played no part, ( $d$ ) only a very minor part, if any, and the prime motive seems to have been decoralet, based on principles of writing that were traditional but to a large extent obsolete.

[^47]:    ${ }^{(1)}$ Serar, Die Vokalisation des Ägyptischen in Zeitschrift der Deutschen I, $\begin{aligned} & \text { orgenlandischen } \\ & 59-61,63 \text {. }\end{aligned}$

[^48]:    ${ }^{(1)}$ For the following see also B. van de Walle, Les Soi-disants "signes déterminatifs" dusysteme hiéroglyphique égyptien in Mélanges de Philologie orientale
    (Liége 1932), p, 203-218.

[^49]:    (1) Setai, Der Ursprung des Alphabets, 121:3.
    (2) Savar, Die Neuentdeckte Sinai-Schrift und die Entstehumg der semilischen Schrift in Nachrichten von der Kgl. Ges. der Wiss. zu Göttingen. Phil.-Hist. Klasse,
    1917. pp. 472-4.
    (3) Sethe, op.
    ${ }^{(3)}$ ( Sethe, op. cit., 473, note 2.
    (') A list of these studies will be found in Drioron, Recuell de Cyptographie
    monumentale (Annales du Service, $40,307,308$ ). To this listshould now be added $L$ at Frise d'Ecriture enigmatique du Tombeau, do Padu). To this list should now be added Lat Frise d Ecriture énigmatique du Tombeaut de Padykam in Sami GABRA, Fouilles de
    l'Université Fouad el Awal à Hermoupolis Ouest "Touna el Gebel." 29-37. lEcriture
     du Papyrus Salt 825 in Annales du Service, 41, $97-137$. [This volume incorporates on aarophony as well as those of Eairman]. D.A.

[^50]:    ${ }^{(1)}$ Brugsch, Thesaurus, 651 D.
    ${ }^{(2)}$ ) Brugsch, op. cit, 651 F
    (2) Brugsct, op. cit, 651 C .
    (9) Brugsch, op. cit, $651 \mathrm{E}:$ is to be read $h^{n} n$, being the phonetic complement $n$.

[^51]:    (1) IV, 115.
    (2) VII, 135, 9.
    (3) Skiqe, Die Vokalisation des Aegyptischen (in Zeitschrift der Deutschen

[^52]:    ${ }^{(1)}$ When, for example, three entirely different versions are suggested for one short text as in the case of the Athribis cryptogram (see the versions of Blackman, Liverpool Annals, 25, 133-7, Drioton, Annales du Service, 38,109-116 ( $=$ ici, p.7-13) and Hanza, Annales du Service, 38, 198-200) decipherment is reduced almost to an or deny that in Ptolemaic texts and cryptograms the scribes ial whether we claim deceive the reader by writing in such a fashion that the scribes deliberately sought to text may occur to the reader. Such a fashion that more than one way of reading the atial point is that regardless of its a truth it may or may not be true, but the esseone version that the scribe had in mind as the is absolutely certain that there was way of finding and proving that version, but acroct one and there must exist some tably fails to provide the safe way.

[^53]:    * [ $=$ p. 533-542 in this edition $]$ * In this edition please see p. 253-289.

[^54]:    ( ${ }^{(1)}$ Cr. Herodore II, 74 : "Dans les environs de Thèbes, ill existe des serpents sacres qui ne font pas de mal aux homancs; ils sont de petite taille et ont deux sanctuaire de Zeüs, car ils lui sont consacrés, comerne quand ils meurent, dans le
    (8) Alan H asprura Erys

    Grammaire de l'Égyptien classique, p. 395.
    (1) Sxilig, Urgeschichte, p. 44.

[^55]:    39; p. (1) Etienne Dhioton, Une statue prophylactique de Ramsès III, Annales vol: p. 70-71.
    $\left.{ }^{( }\right)$Lacat, Mutilation de signes, etc., $\ddot{A} Z$., $51,56$.
    ${ }^{(3)}$ Jakob PoLotsixy, Zu den Inschriften der 11. Dynastle, § 12, p. 11,
    (1) Ludwig Boboeardt, $\ddot{A} Z ., 35$, p. 105.
    (5) Pour la lecture, voir Ermas, Der Name Antef, $\ddot{A Z}$., 39, p. 147.

[^56]:    ${ }^{(1)}$ Voici，à titre d’aide－mémoire，une liste bibliographique sur la question Wilhelm Spiegrlbera，Varia，LXXIII：Die Lesung der Gruppe Rec．de Trav．，vol．26，p．148－149（1904）；－Alfred JАніг，Ägyptologische Miszellen： 1．Über 䭪 und $f_{x}=$ 用，it und itf＂Vater＂，Wiener Zeitschrift für die Kunde des Morgenlandes，vol．20，p．373；－Max Burchardt，Das ägyptische Wort für esgyptienne de M．Erman，Rec．de Trav．，vol．40，p． 2 （1923）；－Hermann KEES，Die
     on Egyptian Accent as evidenced in Coptic Nouns，Poznan，t．VIf，6，p．11－12（1935）； on Egyptian Accent as evidenced in Coptic Nouns，Poznan，t．VII，6，p．11－
    Gustave LEFERVRE，Grammalre de l＇Égyptien elassique，p． 68 （1940）．
    （a）Cf．B．GRDSELOFF，Deux inscriptions juridiques de l＇Ancien Empire．
    Annales，vol．42，p．54－57．

[^57]:    - Set p. 370. above.
    (1) Cf. Annales du Service, 43, 193, note 1. $=$ (ici p. 377 nole 1 )
    (i) Not collated : the determinative is suspect and may perbaps be

[^58]:    (1) is damaged and from the photograph it is impossible to determine

[^59]:    ${ }^{( }{ }^{1}$ ) See further the remarks by Blackman and myself on the use of and hm in writings of Khemmis in J.E.A. 30, 24. Cf. also By.I.F.A.O., 43, 95. The following additions and corrections to the latter papar should be noted : p. 63, line 4, wfi $i$ : for a criticism of this suggested origin see Keimer, Études d'Egyptologie, VII : Zoologica, III:s Nots au sujet de l'hieroglyphe ran, et des viperes. dans i'Égypte ancienne, especially p. 40 f. There is, however, considerably more evidence of the existence, of the word wfi than has yet been indicated in print by either Grdseloff or Keimer; p. 85 , line 18 : for $h 3 i$ read $h 3 i ;$ p. 98 ; n. 1; add: Two further ex. of this value. were suggested by Blackman and myself in Miscellanea Gregoriana, p.:423, n. 126, but I now believe both to read $h s(3)-\delta n^{5} ; p$. 105, line 9 : the complete. reference to the second example of ikr should read. I, $377,17=$ XII, Pl. 327. p. 111, Obs. 1. Delete "Since Coptic uses only 2s"". The sentence should read "It is impossible" etc. The use of $X_{N}$ and to write $h^{c} n^{c}$ is due, of course, to the weakening of $h$ to $h, h u$ becoming $h n ; p .12 t$. line 5 : For $s t p$ Pt $h$ read $s t p n$ Pth. p. 121, n. 1 : For a further note on $h s$ s-snc, see Miscellanea Gregoriana p. 418 , n. 70, and cf. p. 423, n. 126. I am notsatisfied that we have yet established the irue meaning of this expression.
    ${ }^{(2)}$ ) These facsimiles have been taken from MölLrer, Hieratische Palaographie I-HI, No. 225: (a) Gkimertru, Kahun, Pl. 23, 17: (b) Peasant, B. 1, 169; (c) Ebers 25, 14; (d) Anast.IV, 10, 5; (e) Two Brothers, 10,8 ; ( $f$ ) Pap. B.M. 10053, rt. $6,7=$ PeRT, Tomb Robberies, Pl. XIX = Newberky, The Amherst Papyri, Pl. XIII; (g) Pap. B.M. 10053. rt. 6, 2: (h) Pap. Berlin 3073, 1, 5.

[^60]:    (1) The retty (rhty), of course, are best known as mourning for Osiris, e.g. E. I, $216,9-10=$ XI, PI. $289=$ JUNEER. Stundenwachen.p. 112 , XVII, 156-158, but I I do not know of any spellings with
    (3) In addition to the examples quoted below see also E. 1. 45, 2: 120, 7-8; 376, 45 IV, 289, 3 ; VII, 158, 15-159, 1; DII MoranN, Kom Ombos, II, p. 162, No. 747; Dem Morgan, op. cit., I, p. 63, No. 68 and its parallel Rec، de Trav., 23, 165.

[^61]:    ${ }^{(1)}$ Cf. Annales du Service, 43, 250, Note IV. $[=$ ici, p. 447-448].
    ${ }^{\text {(2) }}$ ) Pyr. $90 f$; Petride, Illahun, Kahun and Gurob, PI. XI.
    () Davirs, Sheikh Said, PI. XX; Sceril, Le Tombeau d' Aba (Mem. Miss. franc., V), P1. I.: Soiriri, Le Tombeau de Montou-m-hat (Mem. Miss. franc., V), Pl. I.

[^62]:    ${ }^{(1)}$ ）Other ex．of ph3t n biti are E．III，104，4；V，36， 13 ；VII，43，16；191， 13

[^63]:    (1) Pap. Bremner-Rhind 29, $15=$ Faulinner, op, cit , 73, 13-15.

[^64]:    (2) J.E.A., 24, 49.
    ${ }^{(9)}$ P.S.B.A., 15, 33-36.
    (4) J.E.A., 21, 27.

[^65]:    $\left.{ }^{1}{ }^{1}\right)$ Reading štb dm. $k$ : alternatively štb.k"thou cuttest off ". The Wörterbuch does not record this meaning of stb but it seems imposed by the context. For $g$ ( $(3)$ sty " stones " cf. J.E.A. 29, 14, note (c).

[^66]:    (1) The translation I owe to a suggestion from Professor Blackman who comments : twr ikr most difficult to render satisfactorily. Twr means a Purified, Consecrated, person, and ikr that person is "proficient" in his work (like mnh ), i.e. a well-instructed priest. I suggest "one fully initiated", or alternatively "a purified and proficient priest".
    $\left(^{(2)}\right.$ Drioton, Fouilles de Médamoud (1925): Les inscriptions, p. 53. No. 121,2. Drioton's translation was: "J'ai (fait?) que ton domaine soit épargné par mon filet". but $\ell^{3}{ }^{c}$ does not bear the meaning "epargner". Read at the begianing $[i w] d i . n . i$. The grouping of 1111 in ${ }^{\text {in }}$ (cf. Wb. d. äg. Spr., III, 283) is strange; perhaps the scribe intended to write the more common "11 " $11 \|^{\prime}$ imn "noose" is a pure gucss on my part.

